



INTERNATIONAL CONFERENCE

on

Conservation of Biodiversity
and Sustainable Energy : Law and Practice

12th - 14th February, 2016



Campus Law Centre

University of Delhi
Delhi-110007 (INDIA)

<http://clc.du.ac.in>

PROCEEDINGS

Editorial Committee

Editor

Professor (Dr.) Usha Tandon

Faculty Members

Ms. Anju Sinha
Dr. Poonam Verma
Ms. Harleen Kaur
Mr. Moatoshi Ao
Ms Cheshta Dahiya
Mr. Mayank Mittal
Mr. Aash Mohammed
Mr. Akash Anand
Mr. Neeraj Gupta

Student Members

Ms. Bhavna Bawa
Mr. Raman Kaushik
Mr. Satyendra Gupta
Mr Praveena Bisht
Ms. Garima Verma
Mr. Parikshit Ahuja
Mr. Manan Bansal
Ms. Shilpa Saini
Ms. Shweta Saini

Campus Law Centre

University of Delhi

Delhi-110007

India

<http://clc.du.ac.in>

Proceedings

Conservation of Biodiversity and Sustainable Energy : Law and Practice

12th - 14th February, 2016



Campus Law Centre

University of Delhi

Delhi-110007

India

<http://clc.du.ac.in>





LAW CENTRE
OF LAW



C O N T E N T

	<i>Page</i>
1. From the Desk of Professor-in-Charge & Conference Director	3
2. Sponsor's Note	9
3. Delegates Column	10
4. Inaugural Session	15
Welcome Address and Introductory Remarks Professor (Dr.) Usha Tandon Professor-In-Charge, CLC and Conference Director	16
Address by Guest of Honour Professor (Dr.) Koh Mun-Hyun Soongsil University, Seoul, Republic of Korea	19
Address by Special Guest of Honour Hon'ble Mr. Justice A.K. Patnaik Former Judge, Supreme Court of India	21
Inaugural Address by Chief Guest Ms. Maneka Sanjay Gandhi Hon'ble Union Cabinet Minister, Women and Child Development Former Minister of Environment and Forest	26
Vote of Thanks by Professor (Dr.) Kamala Sankaran Professor, CLC	37
5. Valedictory Session	39
Welcome Address and Closing Remarks Professor (Dr.) Usha Tandon Professor-In-Charge, CLC and Conference Director	40
Address by Guest of Honour Mr. Sidharth Luthra Senior Advocate, formerly Additional Solicitor General of India	45
Address by Guest of Honour Mr. Mohan Parasaran Senior Advocate, formerly Solicitor General of India	47



Address by Special Guest of Honour Hon'ble Mr. Justice Uday U. Lalit Judge, Supreme Court of India	50
Valedictory Address by Chief Guest Hon'ble Mr. Justice Ranjan Gogoi Judge, Supreme Court of India	53
Vote of Thanks Professor (Dr.) S.C. Raina Professor, CLC	57
6. Welcome Dinner	59
7. Technical Sessions	60
Technical Session- I Biodiversity and Ecosystem: Issues and Challenges	61
Technical Session- II Marine and Coastal Biodiversity: Issues and Challenges	69
Technical Session- III Gender and Biodiversity	76
Technical Session- IV Biodiversity, Development, and Eradication of Poverty	84
Technical Session- V International /Regional Legal and Institutional Framework	88
Technical Session- VI Energy Law and Sustainable Development	98
Technical Session- VII Policy and Management	107
Technical Session- VIII Traditional Knowledge and Intellectual Property Rights	118
Technical Session- IX Comparative / Domestic Laws on Biodiversity and Sustainable Energy	124
8. Summary of Discussions	132
9. Cultural Event	150
10. List of Participants	151
11. Organising Committee	155
12. Program Details	158
13. Glimpses of the Conference	161



**FROM THE DESK OF PROFESSOR-IN-CHARGE
& CONFERENCE DIRECTOR**



It gives me immense pleasure to place before the esteemed readers, the proceedings of three day International Conference on “Conservation of Biodiversity and Sustainable Energy: Law and Practice” held at CLC from 12th to 14th February 2016.

This publication contains not only the arguments and propositions made by the speakers during the Technical Sessions of the conference, but it also contains the observations of Chairpersons of each Technical Session and the questions and answers deliberated during the Technical Sessions. The great addresses delivered at the Inaugural Session and Valedictory sessions by the Distinguished Guests are in the first part of this publication. The outcome of the Conference is summarised in the chapter – Summary of Discussions and divided as “Conclusions” and “Suggestions & Recommendations”. The chapter “Glimpses of the Conference” attracts the eyes of readers for a quick glance on various activities accomplished during the Conference. The purpose of this publication is to disseminate extensively the outcome of the proceedings of the Conference. To accomplish this, the whole of this publication is easily and free of cost available at CLC website <http://clc.du.ac.in>. The views expressed by the Hon’ble Guests, Chairpersons, speakers and participants are collectively referred, hereinafter, as views of “delegates”.

The delegates took cognisance of the fact that despite various domestic and international policies and legal framework on conservation of biodiversity- be it forest,



wildlife, marine, coastal, etc.- the implementation suffers from lots of deficiencies. They explored various factors that barge in the way of effective conservation of biodiversity. The lack of political will coupled with lack of infrastructure, man-power and coordination were found to be the main factors impeding the weak implementation of the existing policies and legal provisions. Thus, it was argued that careful adherence to the established procedures and protocols, awareness among the masses, filling the lacuna in legal framework and a strong political will are *sine qua non* for effective sustainable conservation of biodiversity.

While analysing the law for the conservation of flora and fauna biodiversity in India, the delegates noted, with regret, that there are inherent problems in the legal system. For instance, wildlife corridors have found mention in certain environmental and wildlife laws and guidelines, but there is no law which specifically defines or protects wildlife corridors, or prohibits development within, and around important corridors. The construction of National Highways that cut across the National Parks and Sanctuaries results in deaths of animals and isolation of source habitats. The factors of population pressure and poverty were discussed as the predominant causes of deforestation and degradation of biodiversity in the developing countries. The Conference discussed that about 300 people are killed by elephants every year in India. Research has found that the main reason invading human habitat by elephants is their search for food. Similarly, the decline in Tiger population is the result of remorseless erosion of habitat and prey depletion. The toxic waste in water bodies ultimately finds its ways to humans and animals through food chain and consumption of water. The extinction of vultures is an example caused due to the use of a common anti-inflammatory drug administered to livestock known as diclofenac. Thus, to maintain equilibrium between development and preserving ecological biodiversity, it was suggested that the prescription of qualitative conservation goals in European instruments is a feature worth incorporating into the Indian legislations, for it may ensure conservation schemes work towards results rather than merely following procedures with no definite objectives or goals. The delegates agreed that besides legal reforms, the political will, awareness programme, and change in attitude towards our surrounding environment are vital in conservation of flora and fauna biodiversity.

In order to further the aims of Convention on Biological Diversity (CBD) 1992, the delegates suggested that there is a need for incorporation of some compulsory provisions under the Agreement on Trade-Related Aspect of Intellectual Property (TRIPS Agreement) which all member States would be mandated to comply with and the amendment to TRIPS should incorporate three disclosure requirements: (a) disclosure of source and country of



origin of biological material; (b) disclosure of evidence of prior informed consent; (c) disclosure of an evidence of a benefit sharing agreement.

The delegates discussed Indian Biological Diversity Act, (BDA) 2002, that has provided a solid base for implementation of the Nagoya Protocol and opined that considering the rich biodiversity and biological resources available in the country, India should make use of the Nagoya Protocol to convert this instrument as a tool of opportunity to help local communities and conservation efforts. Thus, the BDA needs to be fine tuned to incorporate compliance measures, checkpoints and involvement of local communities in the access and benefit sharing (ABS) process in a big way. The delegates argued that efforts should be taken for the protection of Traditional Knowledge (TK) as many of indigenous communities depend on TK for their survival. The existing forms of intellectual property or a combination of various forms of intellectual property can be used to protect traditional knowledge till the development of a comprehensive *sui generis* legislative regime.

As regard the deforestation in the North Eastern region of India by the practice of Jhum cultivation, it was suggested that regulation and legalisation of Jhum cultivation could help reduce the rapid deforestation. The lack of cooperation in cases of conflict between countries with respect to trans boundary rivers leads to mismanagement of natural water, which in turn directly affect population depending on such resource and destruction of ecological balance eventually. Thus, in the case of Teesta River that flows from Sikkim, India, to Bangladesh, it was stressed that there is a need for holistic approach towards river water management.

Bangladesh's concern for biodiversity at Sundarban, was discussed in the Conference. The delegates were apprised that 12 wildlife species have become extinct and 40 Mammals, 41 birds, 58 reptiles and eight amphibians are listed in red data book of threatened species. Besides, the "top dying" disease of the Sundari trees is a major threat to biodiversity in Sundarban. It was the view of the delegates that in Sundarban the loss of biodiversity could be materialized by providing alternative employment to the locals. Human interference should be limited and forest management measures in both long and short term should be undertaken to sustain the forest and species found in Sundarban.

The existing UN Convention on the Law of the Seas III, 1982 (UNCLOS) and its legal framework for addressing Marine Biodiversity Beyond Areas of National Jurisdiction (BBNJ) was assessed as inadequate, as there are legal and implementation gaps in the conservation and sustainable use of BBNJ. The UNCLOS was examined and was found to be silent on the Marine Genetic Resources (MGR) and Marine Scientific Research (MSR) in Marine Areas Beyond National Jurisdiction (ABNJ) which does not require any permission



from the coastal State thereby more scope for Bio-prospecting. The delegates deliberated on the limitations in international law and agreements to protect marine biodiversity.

The delegates took notice of the fact that there is a high threat to the Gangetic dolphin in the river Ganges due to industrial waste, construction of dams, tourism, riverine river extraction, etc. Despite various measures taken, the Gangetic dolphin continues to decline in number and its present population is estimated to be around 1600-1700 individuals. It was argued that for the conservation of the river Ganges and protection of Gangetic dolphin, stringent compliance of Section 18 of Wild Life Protection Act, 1972 is indispensable in the dolphin sanctuaries. The delegates agreed that tourist activities, cargo streamers passage, heavy vessels, etc. should be regulated and more ecological sensitive zones should be declared within 10 kms on land where no industrial and agricultural activities should be allowed.

The delegates discussed Nigeria's wetlands in Lagos Lagoon that remains neglected resulting in loss of its rich biodiversity, despite Nigeria being a signatory to various international conventions and having enacted various domestic laws and policies for regulation of wetlands. Various challenges highlighted for such loss were deliberated upon which included absence of proper law, capacity building and lack of awareness, the top down approach, invasive species, widespread poverty, urbanisation, flooding and erosion etc.

Investigating into the role of gender, it was analysed that the current legal regime fails to appreciate the critical role played by women in food subsistence and managing biodiversity. The existing legal framework does not secure or promote women's right to grow or gather food, and sustain their households as it is directed towards facilitating commercialization of agrarian and other natural resources. Thus, it was recommended that law makers and policy planners have to ensure that women are not simply 'added' to the conservation programme but rather biodiversity itself should be defined in broader, more inclusive and fluid terms incorporating diverse gendered experiences of different groups.

The delegates examined that there is no institutional framework on energy trade. Thus, the WTO should adopt some policy framework for the regulation of energy trade. There is also a need for collective responsibility for effective implementation of mitigated climate policy in quest for energy security. The delegates appreciated that Redistributive Energy Justice maybe attained thorough "energy trilemma" and its three goals, i.e., Energy Security, Cost Effective Energy and Sustainable Use of Energy. The *Urgenda* decision from Netherland was discussed and it was argued that despite the *Urgenda* decision which is



admixture of European, International and Dutch law, it still bears a resemblance to the legal situation in India and thus could be imported to the Indian scenario. The principle of *locus standi*, the doctrine of separation of powers, and the precautionary principle which are the principles incorporated into the understanding of the climate change mitigation in the *Urgenda case* are well established in the Indian legal system and thus could be applied to the Indian cases.

It was unanimously suggested that India with its tremendous biological diversity and political clout, has the capacity to lead other Nations, especially in Asia, towards an effective regional conservation regime compatible to CMS (Convention on Protection of Migratory Species of Wild Animals, 1979) system. Delegates were of the view that this would help gain in conservation of certain threatened migratory species such as the Tibetan antelope, Bengal tigers, Asian elephants, the Amur falcons, etc.

As the Professor-in-Charge, I take pride in writing that the successful culmination of this conference is another remarkable achievement of CLC in the past few years. The Conference could not have achieved this level of success without the cooperation and participation of our esteemed Guests - Hon'ble Ms Maneka Sanjay Gandhi, Hon'ble Mr. Justice Ranjan Gogoi, Hon'ble Mr. Justice Uday U. Lalit, Hon'ble Mr. Justice A.K. Patnaik, Mr. Sidharth Luthra, and Professor Mun Hyun Koh. The contribution of our Distinguished Guests along with the contribution of Chairpersons of Technical Sessions, delegates, my colleagues and students, to make this conference a huge success is gratefully acknowledged. Last but not the least, on behalf of CLC, I express my sincere gratitude to Mr. Mohan Parasaran, for graciously sponsoring CLC conference, for the third consecutive time, thus creating a fascinating history to be emulated by CLCns.

Usha Tandon

7th March, 2016



Mr. Mohan Parasaran



Sponsor's Note

MOHAN PARASARAN

B.A., L.L.M. (CANTAB)
Senior Advocate

Off : R-20, Greater Kailash, Part-I
New Delhi-110048

Tel.: +91-11-26224765, 26224319

Fax : +91-11-26478228

E-mail : mohanparasaran@hotmail.com

Chamber : 427, New Lawyer's Chamber
Bhagwan Dass Road
Supreme Court of India
New Delhi-110001

Tel.: +91-11-23070427

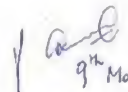
E-mail : mparasaran2020@gmail.com

Sponsor's Note

I congratulate CLC for having successfully conducted another international conference, this time on conservation of biodiversity and sustainable energy: law and practice from 12th to 14th February 2016. It was indeed my pleasure to sponsor some events during the said conference. The three day conference was packed with wide ranging subjects concerning climate change. The themes that were subjects of discussion and presentation at the conference were far and wide ranging which varied from topics like ecosystem to marine biodiversity, provisions of sustainable and clean energy, other development issues and eradicating poverty which is also very relevant for achieving sustainable environment.

It is noteworthy that the conference was attended by distinguished academicians, lawyers, bureaucrats and reputed NGOs. I was also happy to notice delegates from many countries including Algeria, Bangladesh, Nigeria, South Africa, South Korea, Uganda and United Kingdom. I had the occasion to participate in the Valedictory Session, though it was a Sunday still the function was packed with enthusiastic delegates, audiences and students. I am happy that CLC has been maintaining and up keeping high traditions and has been playing useful and constructive role in the field of legal education. I was delighted that the valedictory session was attended by distinguished alumni of CLC, many of its alumni have not only become judges of supreme court and judges of various high courts as well as top ranking law officers of the country and of several states but have also distinguished themselves in diverse fields within and outside Bharat.

I wish CLC all the best in future as well.


9th March 2016

MOHAN PARASARAN



Delegates Column



The structure of the conference to meet the objectives was Perfect. I got enough opportunities to interact with the fellow participants. It helped a lot in creating a common platform where I could share my data, latest information etc. Accommodation facilities was Good. Food quality and service was Perfect. Conference/ Class room facilities were Good. Computer facilities were Perfect. Got opportunities to interact with the resource persons. The theme of the conference was quit unique. Since, this is a very important topic for awareness more participants should be given the chance to get involve.

Dr. Pranab Pal

Wildlife Institute of India

Chandrabani, Dehradun-248001 U.K.



It was a meticulously planned conference. The main theme and sub-themes were brilliantly chosen and satisfies the need of time. The paper presenters were all experts and presented their paper fabulously. The accommodation and other hospitalities provided by the host were great. The Technical Sessions were information bank for me and I believe the other delegates too have gained a lot from it. The addresses by dignitaries consisting of Union Cabinet Ministers, Judges of Supreme Court and Senior Advocates of Supreme Court are treasure to be archived. Such events are rare and one is lucky to be in such event, and I am lucky to be a part of such event. CLC being of international reput has always astounded the world with great leaders and legal jurists. It is of firm believe that the deliberations of this conference would machine solutions to the challenges of Biodiversity and Sustainable Energy across the globe. I congratulate Professor (Dr.) Usha Tandon and CLC for successfully organizing the conference and contributing to the international environmental jurisprudence.

Professor (Dr.) Koh Mun-Hyun

Vice Dean

College of Law

Soongsil University

Seoul, Republic of Korea



I would like to start by congratulating Professor Usha Tandon for yet another successful international conference at CLC Delhi University. This is equally my third time of attending and each one is an improvement on the previous one. For example, there was better time management of the sessions and more time for question and answer sessions. We also had very quality papers. However, given the international reputation of CLC, Delhi University, the presence of more international delegates would have brought more diverse perspectives on the team of the conference. Once again, congrats for a job well done.

Dr. (Mrs.) Erimma Gloria orie

Lecturer

National Open University of Nigeria

Nigeria



It is my pleasure to write few words as testimonial after successful completion of the conference entitled “Conservation of Biodiversity and Sustainable Energy: Law and Practice” held from 12th -14th February 2016. I would like to convey my heartfelt thanks to all organizers, participants and volunteers for proving all sorts of support to me while staying at DU. The conference was excellent no doubt. I personally gain a lot of information which enrich my knowledge in the field of biodiversity and sustainable energy. The visual sessions conducted by the scholar and presented by the scientist not only inspirational but also enjoyable because of their updated information. Wishing to meet again soon.

Dr. Md. Moshiur Rahman

Deputy Director

Bangladesh Public Administration Training Centre (BPATC)

Dhaka, Bangladesh.



It was an intellect, thought provoking great experience to attend international conference on “Conservation of Biological Diversity and sustainable Energy : Law and Practice”. It was well organized and well conducted from beginning to end. I am obliged to Campus Law Centre, Professor-In-Charge, Prof. Usha Tandon, Coordinators and all, to provide each and every support to attend it in healthy environment. I wish success and best of wishes to CLC for upcoming events to enlighten the ray of knowledge in each and every corner of the world and to serve the world, society in true spirit

Ms. Mukta Verma

Assistant Professor

Faculty of Law

University of Allahabad



It was awesome!!! Everything in this conference went superbly well and a huge thank to the organisers. The Chairs of the sessions and presenters were full of great information. There was always something new to learn and never a dull moment. It was an incredible opportunity for me to participate.

Dr. Shilpa Bagade

Assistant Professor

IMS Law College Noida



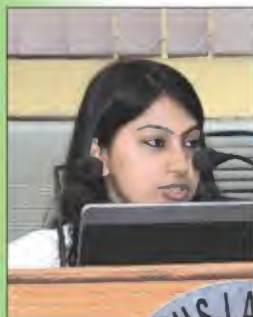
I congratulate Prof (Dr.) Usha Tandon and team for holding a stimulating and Successful conference. It was extraordinary conference for me and my husband. All the Technical Sessions were good and I learnt many things about Conservation of Biodiversity Laws and Sustainable Energy. I thank you for providing me an opportunity to present my paper in such wonderful Conference.

Chandralekha V.

Assistant Professor

SDM Law College, Kodialbail, Mangalore

South Canara, Karnataka



My experience at the conference was self-rewarding. Two specific things I would like to mention time management and the framing of themes and sub-themes of the Conference.

It is worth mentioning that all events stuck to the scheduled time. Each and every session started and ended on time with a margin of five minutes. There was a time when I did not feel the need to look at the watch anymore, as the sessions and the events guided me about the time. Secondly, the themes and sub-themes were framed in such a way that it left room for discussion and deliberation from diverse areas of study, instead of having a narrow scope. This enabled a very enriching experience as we got back with us idea on a myriad areas and subjects. Hence I would thank CLC for giving me this self rewarding experience.

Nikita Pattajoshi
*Research Scholar,
WBNUJS, Kolkata*



This Conference was very clear and focused. This sessions were effectively facilitated. The presenters and the facilitators were enthusiastic and engaging. The sessions along with the events provided me with opportunities for input, questions, networking, and/or other interaction. The pace of the sessions were comfortable. These session and the content were relevant and would help provide more clarity to my teaching. It enabled an insight which otherwise is not available in other conferences. I learned more on issues which not only related to my subject but also closely ancillary issues related to it. The interactions highlighted the loop holes between those carrying on protectionist measures and how data circulation takes a longer time for the public to be informed on vital issues such as the issue of increasing number of tigers in our country as the sensex says they have declined and the specialist of the wildlife protection revealed how measures are being taken to improve the species of the Asian wildcat and the number found to have increased in our country. It was not only educative and informative but had sessions *extraordinaire* such as energy and Intellectual property Rights related issues which brings the point of



cross researches into focus, of how sustainable development should in reality transcend from having development in the modern world juxtaposed with having special preventive and protectionist measures for our biodiversity and environment. One of the presentations of defining corridors of the natural species and laxities on the role of the government in preparing guidelines for effective implementation of our statutory framework could help provide suggestions for the government to take measures in completing the task on priority basis. The visuals in various sessions helped me understand and remember the information presented. This sessions provided resources for accessing more information on Biodiversity and related topics. It was a very well organized conference with timings enforced strictly and each session transmitting the themes providing justice to information as well as suggestion for implementation purposes.

Dr. Shabnam
Assistant Professor
LC-II, Faculty of Law
University of Delhi



Inaugural Session



**Welcome Address
and
Introductory Remarks**

Professor (Dr.) Usha Tandon
*Professor-In-Charge, CLC &
Conference Director*

Mrs. Maneka Sanjay Gandhi, Hon'ble Union Cabinet Minister, Women & Child Development. Hon'ble Mr. Justice A.K. Patnaik, Former Judge, Supreme Court of India. Prof. Koh Mun-Hyun, Professor from South Korea, Professor Kamala

Sankaran, delegates, distinguished colleagues, and my dear students, I am extremely delighted to welcome you all on this inaugural function of three day International Conference, on the "Conservation of Biodiversity and the Sustainable Energy". We really feel honoured to welcome our Chief Guest, Mrs. Maneka Sanjay Gandhi. Mrs. Gandhi is not just a political figure but also, an era in the Indian Constitutional and political history. You are all law students sitting here. You must have understood what I have said. We know that it was that case of *Maneka Gandhi v. Union of India* which has given new dimensions to the right to life, personal liberty, and right to equality. I am talking about that 1978 Supreme Court judgement and our students know that well, as this is one of the compulsory readings as far as our course curriculum is concerned.

Mrs Gandhi is presently adorning the Chair of Women and Child Development Ministry as a Union Cabinet Minister. Long before, 25-26 years back, she had been the Minister of Environment & Forest from 1989 onwards. During her tenure of 3 years she had been successful in enacting many laws, particularly for the welfare of animals. She has been successful in creating a department for animal welfare. She has also started an organisation called People For Animals. And, you must have watched more than me that TV show by the name of "Heads and Tails" which was anchored by Mrs. Gandhi. As a matter of fact, she has a multifaceted personality. She has been a journalist and the author of various books. My research team has given me special reference of the book, even I was not aware of before this,



that the book is known as “Brahma’s Hair”. It is a mythology of Indian plants and it contains various kinds of stories, and those stories regard trees as having heavenly origin. The book gives biological names of the tress. Mrs. Gandhi has been conferred with various national and international awards for her contribution in the field of animal rights and protection. We extend you Madam, a very warm welcome on this occasion.

We are privileged to have Hon’ble Mr. Justice A.K. Patnaik with us. Justice Patnaik has been in the Supreme Court of India from 2009 to 2014 and as a judge of the Supreme Court, he has been a part of various landmark judgements. Some are very well known- Independence of CBI & Padmanabhan Swami Temple. There was a time in the late 2000’s that the Supreme Court has created a bench by the name of “Forest Bench” which later on was known as “Green Bench”, and Justice Patnaik was part of this Bench and has delivered various landmark judgements on environmental law. I would like to mention one or two of such judgments. T.N. *Godavarman case* as we know is a very famous case on forest conservation, concept of that problem. Starting from 1996, the last order that came from the Supreme Court in this case in 2013 was by Justice Patnaik. He has been associated with the legal aid services & other thing. In my few interactions with Justice Patnaik, I found that he has very deep academic interest and has been working on various books and he has also asked me if some of my colleagues are interested to work with him. He is a very nice and gentle person. Sir, we extend you a very hearty welcome on this occasion.

I am very glad that Professor Koh Mun-Hyun is with us this morning. He is teaching environmental law at Soongsil University in South Korea and apart from teaching environmental law, he has been holding projects on various aspects of environmental law, particularly climate change. Just now, he was telling me that he is working in the area of energy law too. He has authored many books and articles. Lots of his writings are available on the internet, but those are in the Korean language. One thing that I specifically want to mention at this occasion is that his thesis has been awarded at the symposium of European Constitution Association, which indeed is a quite great honour for any work that a person does. So, we give you a very special welcome on his occasion.

I welcome Professor Kamala Sankaran who is my colleague here at the CLC who very graciously have agreed to be a part, a very active part of this, to give the vote of thanks here. She is a well known scholar in Labour Law and Constitutional Law. I also welcome all my colleagues, delegates, students, especially student volunteers sitting here.

Now coming to the theme of the Conference, we are all aware of the alarming loss of bio diversity. Despite the fact that we are trying to reduce the loss of biodiversity, our efforts are



not that successful. That is the reason why we are assembling here. That is the reason why we have chosen this topic of the Conference. Even though loss of biodiversity has been recognised in our Millennium Development Goals, we have failed in achieving the goals of 2010, we have failed in achieving of goals of 2015. I am talking about the global failure of achieving it. These must have been certain lapses. Whether those lapses are in the law, whether those lapses are in the policies, whether those lapses are in the implementation of that or the practice of that, all those kind of the angles are going to be discussed herein in the coming days.

As the Conference Director, I would like to make one appeal to the delegates. Please leave some time for the Question and Answer Session. There is also a slot for the Chairperson to make the observations at the end of the session. Whatever time the Chairperson gives you - which may not be more than 15 or 20 minutes, please stick to that. We can achieve that only when, we do not read the paper and throw main line of arguments. So, I really seek your corporation to make the Technical Sessions fruitful. I take pride in mentioning that CLC has always been concerned with quality legal education, and I am quite confident that as far as this three day Conference is concerned which is going to be inaugurated by our Hon'ble Chief Guest Mrs. Maneka Gandhi soon, with her blessings and her best wishes, this is going to be another big success for us. With this I wind up my address, welcoming you all again.

Thank you!



Address by Guest of Honour

Professor (Dr.) Koh Mun-Hyun

*Soongsil University, Seoul
Republic of Korea*

Namaste !

It is my greatest honour to be here and specially to give a Special Address. I sincerely thank Prof. Usha Tandon and related authorities for calling me here to give Special Address. My English is very poor, but today, it is my honour to be with Hon'ble Justice A. K. Patnaik. I am so sorry for the incorrect pronunciation. It is my great honour. also, I thank Honourable Minister - Union and Cabinet Minister- Mrs. Maneka Sanjay Gandhi.

I have prepared my PPT for Special Address but, I would like to give my Special Address briefly. As Prof. Usha introduced this international conference, this conference under the name of Conservation of Biodiversity and Sustainable Energy, I think this is very important thing in the world and we together have to study this thing from this time to the end. Perhaps, forever we have thought So. I came here to give my presentation. As Prof. Usha introduced me briefly I am performing a very big Project sponsored by Korean Government, Ministry of Environment and, another by Ministry of Trade and Commerce.

As you know IEA – International Energy Agency – have offices operating in Paris. IEA promotes reduction of CO₂ emissions for both conventional fossil-fuel CCS and for bioenergy with CCS (BECCS) by working with member and partner nations on development of cost effective and efficient international and national energy policies including carbon capture and storage (CCS), trading mechanisms and clean low-carbon technologies. So, I am performing my project sponsored by many countries. It is a project which will continue for 8 years. This is the third year. Still for another five years I have to study. But, if the project should end I can still work one more year may be.



Another of my big project is sponsored by Ministry of Trade and Commerce. The project is the climate change and the energy law. My student will give a special presentation in today's or tomorrow's session may be. So, climate change I think is our common mission for solving it together. So, I came here with co-operation from Usha Tandon on climate change and energy. This is a beginning for me. I hope, I sincerely hope this symposium will bring about fruitful output on energy problem and related issues.

Thank you for your kind attention.



**Address by
Special Guest of Honour**

Hon'ble Mr. Justice A.K. Patnaik
*Former Judge
Supreme Court of India*

Mrs. Maneka Sanjay Gandhi, Chief Guest at this inaugural seminar of the International Conference, Prof. (Dr.) Koh Mun-Hyun of the Soongsil University, Seoul, Guest of Honour, Prof. (Dr.)

Usha Tandon, PIC of CLC and the Conference Director, Prof. Kamala Sanakaran, Prof. of CLC, all the delegates participating in the conference, dear students, a very good morning to all of you.

Now first of all, before you start participating in the conference on “Conservation of Biodiversity and Sustainable Energy: Law and Practice” you must appreciate what is biodiversity and why is conservation of biodiversity necessary. This is the most important thing first of all. Then only you will be able to participate in the conference. The best understanding of biodiversity I got when I was working on these cases in different Courts. The definition of Environment given in section (2) (a) of the Environment (Protection) Act, 1986, says “environment includes water, air and land” and this what follows is important “and the inter-relationship which exists among and in between water, air and land and human being and other living creatures, plants, micro organism and property”. So this is biodiversity. Biodiversity means, air, water, land, human being, all living creatures and most important is the interdependence of all this for life to sustain.

Now, I may give a very good example. If you have gone to Kenya, which is a tiger sanctuary, you will find in the museum there is a chart given of how this biodiversity works. How they are all interdependent. Kenya is a place where tigers are preserved. And, you will find in the chart, it is clearly shown by drawing that we have forest, we have green plants, all these green grass is being eaten by herbivores animals like deer. Now if too many of this



deers or herbivores animal exist in the forest, their population will go up, then what will happen. All the green cover will go. Therefore, what is necessary is someone to reduce the population of deer and thus we have tigers. Very interesting chart.

So, God has provided a natural environment by which a balance is maintained between all components of environment. Now coming to the law on the topic, it is the Supreme Court of India, which for the first time interpreted the Article 21 of the Constitution, in what, *Mrs. Maneka Gandhi v. UOI*, 1978 SC reported, where she was entitled to the passport, passport was not given, she approached the Supreme Court and the Supreme Court changed the very concept of Article 21. Earlier in *A. K. Gopalan's case*, the Supreme Court took the view that procedure established by law in Article 21 means procedure established by statutory law. Therefore, if the statutory law is complied with liberty can be taken away, life can be taken away. That was *A. K. Gopalan*, way back in the 1950s. *Maneka Gandhi* case brought in a big change in the law. It said procedure established by law is not just statutory law, if the procedure made by the statutory law is not consistent with principles of natural justice, not consistent with due process of law, then it does not satisfy the requirements of Art. 19 to Art. 21. That is what was held. She was denied the passport without even an opportunity given to her and the Supreme Court said that passport is part of the liberty of the person to travel abroad, cannot be taken away unless the principle of natural justice is followed and a due procedure has to be followed. This is what *Maneka Gandhi* case was.

Now, the Supreme Court further expanded it, Art. 21 – Right to life means right to clean environment, without clean air, without clean water, without biodiversity, life cannot exist. Therefore, the right to life includes right to clean environment and is part of fundamental right under Art. 21 of the Constitution. Courts have power to enforce that right. The SC has got that power under Art. 32 and High Courts have that power under Art. 226. This is how the law was introduced in India. There was no law earlier, and with the expansion of Art. 21, it was brought in and now it can be enforced by the Courts.

I may give some examples. You just heard your professor telling you that I was part of the Environment Bench. Besides environment, I had also decided some matters related to environment in the Supreme Court. The first illustrated case would be, this *Sterlite Industries Ltd. v. UOI*. The industry wanted to set up copper smelter plant in Tuticorin and emissions from the plant polluted the air, some discharged water polluted the soil. The High Court closed down after finding that it polluted the entire atmosphere by number of reports. The matter came to Supreme Court before us. We thought the industries also require copper, copper is required for telephones, development must also take place. Right! Then we ensured



that it invested more money on plant apparatus to ensure that there is no more pollution of air and the water. Reports were taken from various scientific authorities, Pollution Control Board so on and so forth. Once we were satisfied, then we allowed the plant to open. But then after a period of 6 months or one year, it had really polluted the atmosphere. As the polluter must pay for the damage and clean the environment, we directed Sterlite to pay a compensation of Rs. 100 crores to the collector who used that to rehabilitate the soil and the water and the atmosphere and ensure that there is a clean environment. Therefore, this is one way, there is an example of an industry.

Then you heard Prof. Tandon saying that we were part of the Green Bench in *Goa Foundation* case.. The Goa foundation, you know Goa is a peculiar place, it is a small State. Right! One side is a sea and the other side is a sanctuary. Right! And they were mining in contravention of Forest Conservation Act, 1980. One of the issues that was raised was that, now sanctuary obviously cannot be given for mining purpose leases. But, can mining be allowed within one Km away from the sanctuary. We said no it cannot be allowed. That one Km has to be maintained. They said there is no law. How do you maintain it. There may not be any law, but the Supreme Court can enforce it by virtue of its power under Article 32 read with Article 21 of the Constitution. So within 1 km if any mining takes place, blasting takes place, the animal will be affected. No question of mining within 1 km. This is where Supreme Court laid down restriction where there was no explicit law made by Parliament. Right! So this is how, this is a case of mining where we said environment, the biodiversity cannot be affected, wildlife cannot be affected by mining within 1 km of the sanctuary.

Third case, which again we decided. Two judge bench case. What had happened is the tiger population, my brother judge who was there in the matter earlier, before I joined the bench, suddenly took a view on a matter that came from Madhya Pradesh, that tiger population has gone down. When I joined the bench I tried to impress upon my brother judge that as far as my information is concerned tiger population has gone up. He denied. Then we called upon the Additional Solicitor General of India, Ms. Indira Jaising to file an affidavit as to whether the tiger population has gone up or gone down. And, she filed an affidavit saying that the tiger population has gone up substantially. Actually, it had gone up because I was in Madhya Pradesh, I knew the facts and he did not know. Then he agreed with me, let us relax this. But then, we said we will relax it provided there is a National Tiger Conservation Authority constituted under the Wildlife Act. But, they had not laid down, the standards and the norm of tourism vis-a-vis tiger. We directed National Tiger Conservation Authority to lay down the norms and the standards and issue it to all the states so that they can be followed. So that there



is core area within which no tourism is possible, then there is outer area. And all those was done and then we relaxed it. After it was laid down, we can relax it.

These are three illustrative cases that I gave as to how the Supreme Court in exercise of its power under Article 21 read with Article 32, tried to preserve biodiversity.

Not the State is not doing anything regarding this. There is a constitutional provision under Article 48A – a Directive Principle of State Policy – which states that state shall endeavour, protect and improve environment and safeguard the forest and wildlife of the country. And consistent with this Directive Principle of State Policy, a number of Acts have been made by the parliament:- Environment Protection Act, 1986, Forest Conservation Act, 1980, Water Prevention and Control of Pollution Act, 1974, the Air Prevention and Control of Pollution Act, 1981, the Wildlife Protection Act, 1972 etc. Various other Acts are also there. So they provide a mechanism by which the wildlife can be protected, the air pollution can be reduced. Under the environment protection act the environment clearance is required before any non-forest activity is taken up like industry or mining. And under Conservation Act, forest approval is required. Right! And Mrs. Gandhi when she was there as Forest and Environment Minister, she must have done all that job. Similarly after Water Act there is a consent required before you start any industry.

So there are regulatory measures, that Parliament has already introduced. But my experience is that in practice the regulatory authorities are not very tough and in other cases they are so tough that nothing is possible. A balance has to be made. Parliament has now established National Green Tribunal which is trying to bring and balance between the environment and development.

Now, coming to sustainable energy. You know energy is needed for development. But, there has to be a need for efficient use of energy. Energy cannot be consumed by the present generation at the cost of the future generation. Right! And, sustainable energy must be utilised by every generation and some energy must be left for the future and has to be managed efficiently. That I call sustainable energy. We call it as an inter-generational equity principle. Not only for this generation but for future generation yet to come. There is a recent Act of Energy Conservation Act, 2001 which provides for establishment of a Bureau of Energy Efficiency which will recommend measures. I took the help of environmental experts to write down the judgement of Goa Foundation. If you see number of experts have been referred to in the judgment. The expert body Bureau of Energy Efficiency will recommend measures and it is for the Central government and State Governments to adopt



these measures by way of specifying norms and standards by which energy is not wasted unnecessarily and managed efficiently. The Act also provides for adjudication of disputes. Once adjudication of dispute is there then of course judicial review is available under Art. 226, Art. 136 and all those appellate power will be available.

I hope all these aspects of biodiversity, conservation and efficient management of energy will be discussed in the conference. I thank to Professor Usha Tandon for inviting me to share my thoughts with you.

Thank You!



**Inaugural Address by
Chief Guest**

Mrs. Maneka Sanjay Gandhi

*Hon'ble Union Cabinet Minister, Women and Child Development
Former, Minister of Environment and Forest*

Honorable Justice Patnaik Ji, Professor Tandon, Prof. Koh Mun-Hyun, ladies and gentlemen, I am very happy that you have called me for this conference. I am only going to talk about animal biodiversity and show you, not the laws, which Justice Patnaik Ji has talked so eloquently, but

simply what we do to the animal biodiversity.

Animal law is regarded as the flip end of environmental law. Most people don't take it seriously. Most judges at Tis Hazari level don't take it seriously at all. So when you go for a case, you are likely to get a balance that tips in favor of "*Bechara ghareeb aadmi hai*" rather than what damage he has done. So I am going to explain to just a few things. The environment, all environmental law management is about trade offs. How much are you prepared to give for what you are expecting to get. If your trade off is a bad trade off then you give a lot and get nothing. And in most cases this is what has happened because we don't understand what the trade off is.

The second reason why we don't manage our environment problems efficiently is because you sitting in this great democracy do not relate environmental problems to your own living. You in a democracy have a right, before any right was established by *Maneka Gandhi v. State*, you have the right to breath, you have the right not to get ill, you have the right to get clean water, to eat unpolluted food but none of you exercise this right. None of you! So a few people, a few people who make factories, take their money, spend it in London, buy race horses, do all sorts of things, and the majority of us are at their mercy. If you look at where the factories start, all the polluting factories are in places like Kutch, places like Chhattisgarh and the owner lives in Delhi. "*Aish karta hai dilli mein*" and the poor villagers around that Iron Ore factory are dying but because they die at a distance we do not relate it to ourselves.



Now I am going to come back to animals. Is there a single animal that is not vitally important to this country? Not even one. Not even the cockroach, whom we all hate. What does the cockroach do? If we don't have cockroaches we will die. Almost immediately. "*jab hum log nahatein hain, hamara jo maila nikalta hai*", human waste, if it goes directly into the water bodies, you will not last two days because all the water bodies will be so polluted. But when eaten by the cockroach it gets filtered through them. Their "*maila*" is relatively much cleaner. And that is what ultimately goes into the water bodies. Saving us! so here we have free cleaners but what do we do? Instead of rewarding them we clean them out.

You take anything, let's take the mosquito, the most vicious, dangerous creature on the earth is mosquito. Let's suppose all the mosquito will disappear one day. You would have the entire breakdown of food chain. Because mosquito kill rackets. Rackets destroys plants. So, removal of mosquitoes would mean explosion of rackets. What we have done is, we have removed mosquito predators. Having removed mosquito predators and creating conditions for them to become over populated, mosquitoes like human beings, only cause damage because of over- population.

But, let me come to things that bother us. For instance, this morning at 6: 30 a.m. I received information that a truck full of camels has come into Hissar. Now, the Rajasthan Act, which I helped make, bans camel for being part of the food chain. We cannot kill them. And the Rajasthan government has said that no camel can leave Rajasthan. Why? Seven years ago there were 10 lakh plus camels. Today there are only 40 thousand. And this genocide, why has it taken place? Is it to eat? First of all "*har raat ko das (10), pandarah (15), bees (20), truck aa rahein hain*"!! they are going to Bangladesh. Why are they going to Bangladesh? "*kaun unth ka maas khata hai?*" where there is so much meat available. Meat from camel stinks, it is difficult to cook, it has very little fat in it because the fat is all in the hump, and nobody eats the hump. It is a difficult meat to eat apart from being illegal. Is it being killed for the industry? No it is not because inspite of all the factories which say "*Ganesh aur Devi ko banaya hai*" out of camel bone and sell it to tourists, every single one of them is cow bone. So is it being used for tourism? No it isn't? so why is it being killed? Let me explain it to you. In 1965, the raiders when they came, the Pakistan attacked India on many fronts. One of the main attacks took place on the Kutch-Rajasthan open border and we lost many lives there. As a result the government reacted immediately and created the BSF. When BSF-Border Security Force was created, it was created only for this border. Now its on many other borders, but it was created for this. What did they do? They realized that they needed camels because there are 30 feet high shifting dunes, these are lands that constantly change their topography. It is difficult to maneuver any kind of vehicle on them. Border is still open



and is not being used for “hamala karo” but in different ways. Drugs, prostitution, women going up and down, arms being brought in. there are many ways that a country can attack another country. Which need not necessarily be open warfare. Now they decided that, BSF decide that what they needed, after all their scientific experts moved in was 1189 camels. What age? Everything was decided. They had to be over 4 years old, they had to be trained, they had to be “surra” free. And these now are used on the border as not only protection, night patrols or day patrols, but they are also used to take gas cylinders for cooking and sustain the troops that are on the border. Today how many camels do we have? The BSF has given an urgent SOS to the government of India saying we only have 530 camels and everyday they are getting less. Who are the people killing camels and why are they killing them? Everyday we catch them, when do we catch them? After they have slit their throats and just left them there. Now anybody who has bought the camel, why would he simply slit its throat and leave it in Mewar? In a graveyard, on a road. Why would they kill them? The entire gang is mafia gang that works out of Baghpat. None of the people in the gang are Indians. They are all Pakistani sitting there. I have been to court in last 4 years. I have been to court over 200 times. Everytime we have caught a group of camels. We have lost 99% of the cases because the judges in Haryana and Delhi (the Tis Hazari) say “*gareeb aadmi hai*”. He is a “*kisan*”. Not one judge has applied his mind to say or not even one lawyer, the public prosecutor, to say what “*kisani*”, what “*kheti*” is done by camels. Their feet are so flat that they destroy thing. So how is it that same people are being caught again and again and who buys a camel for Rs. 50,000, gets a truck of 16 or is bringing 25 at one point, how could he possibly be a “*gareeb aadmi*”.

Now the High Court ordered that “*ki jo superdari mein diya*” technically they have gone on superdari, “*jo superdari pe diya hai*”, go and check out. So a team was sent under the High Court orders, last week only. And they found one man in Baghpat in the same village is sitting with 90 different “*parchas*” of superdari with not even one camel there. Now the point is this is not being done to kill camels for meat, it is a war against India. But until we understand that you will keep taking this lightly.

You take cow trafficking. Every night 300 trucks come into Delhi. Cows, buffalos get cut. The entire police get their bonuses from cow smuggler, and everybody is involved in it. It has nothing to do with Hindus, Muslims, Sikhs. It is totally secular and totally illegal. But a paper has been done, a paper has been done by the I.G. of U.P to find out what is happening to the money that is being illegally earned through slaughter houses, illegal trafficking. And he has said that 75% of the money has gone into getting guns for the Maoists from the Nepal to the Chhattisgarh border.



Now are we going to take an illegal trade lightly? We stop trucks the judges give them back. “*Gareeb log*”! “*superdari*”! Has there been one case in India, not even a case in which Superdari, has gone to its logical end. After all if I give butcher 50 buffalos, when the law says that he can carry only 4 in one truck and he is carrying, 50 to 90 and I pick up those animals and give it back to him and say “*supardari pe rakh lo*”, then at some point I should call back those animals at some time when the case finishes. But not one animal case has ever finished in India. Not even one! Even the wildlife cases, I rescued, I was on my way to Pilibhit, my constituency, 8 years ago, I stopped at a “*dhaba*”, to have some food. I went to the bathroom and outside the bathroom was a cage, which had a huge Python in it. So I called the owner, confiscated the Python, brought it back here, put it into the zoo. The case has now come for its first hearing eight and half years later. When I have lost the papers, my memory is dim, and it doesn’t make any difference. He never went to jail even for one day. The charge sheet was filed. But that is it. The case will go on for twenty, thirty, fifty years. The Python was in the zoo, the Python has also died by now. But the case has not started. So do we have to take this seriously or not? For the first time the “*supardari*” order has come for the whole of India, just asking “*ki kahan gaye wo janwar*”?

The FBI, in America made a new law and they had decided that all animal crimes anywhere in the United States, has to be reported to the FBI. They have an A list and a B list. The A list is of heinous crimes including murders but not armed murders, murders with extreme violence, terrorism, arson, at that level. The B crimes are the ones that don’t go to the FBI because they are taken less seriously. Robbery, break-ins, mugging, etc. Now under the law, all animal crimes, including a man who beats his own dog has to go to the FBI and has been put into A register. And what is the reason for that? The reason they have found, after they have done not one, not two but hundreds of surveys, showing, and each survey has come out with the same answer, which is that all people that go into jail for violent crimes have all started their career by killing animals and have all been excused.

“*Arre bachcha hai. Titali ke pankh uttar raha hai, toh bachche toh aise karte hi hain. Agar apne jute ke saath cheetion ko mar raha hai, are bachche toh bachche hi hain. Agar kutte ki punch par fire cracker attach kar raha hai, are maze ki baat hai.*”

You know my hospital; these are the kind of crimes we get day after, day after, day.

Now, look at cows walking on the streets. Now because of many court rulings you hardly find them. But when you see a bull at near, say a shopping complex, you will find acid thrown on them. “*Jo kele wala baithta hein*”, he has a bottle of acid which he throws on a bull, when that poor hungry animal comes close to him. When Pandit Nehru insisted on an



Act being made in 1960, he considered it so important, that it is the only Act made in Parliament based on an independent Bill brought in by an independent member. Rukmani Devi Arun Devi.

I have been in Parliament. I am the third longest serving member of Parliament as it exists now. In my all these years there, I have never seen an independent Bill taken seriously there at all, ever. You can say the most wonderful things on Friday afternoon, on Saturday "*kude mein gaye*". Even while they are speaking, there are five members of parliament to listen to them, and a Minister who will read a book while they are speaking. When Rukmani Devi Arun Devi brought this Bill, Prevention of Cruelty to Animals, Pandit Nehru said we will adopt this Act. So this Act was taken in 1960, and made into a law. This is the only Act ever done so. Pandit Nehru and his cabinet took it so seriously, that the fine at that point, for any form of cruelty, was Rs. 50 rupees. This is when my father was a colonel earning 1200 rupees. So you can imagine the seriousness. Now the 50 rupees won't even buy you "*moongphali*". But it has never been enhanced, so we are not taking it seriously. Our attention has been detracted from the seriousness of the crime itself. As the Hon'ble Judge was talking to you about the tiger as a predator, it's not wishful thinking, it's not giving you a tale which is hallucinations. The Sahara had thick, thick forests on it. Every Middle Eastern went and shot and killed leopards, tigers, so all the predators were killed. "*Natija*"? Within a hundred years, or even less, the Sahara is a desert. The desert has expanded and expanded and expanded. When it expands into a desert, the local people lose their lives. So you kill a tiger, you kill yourself. You kill anything, and you will create a problem. Now, we have for instance, white ants in the forest, who will destroy the forest. There are only two animals that take care of that. One is, the bear, which by a series of judgments, by the Supreme Court, High Court, now the bear is no longer allowed on the road for dancing, so called dancing, but it took ten years to convince the Government and the Courts. Now they are all in shelters organized by me. But when you remove the bears from the jungles, you leave the trees to white ants. Now you have got only one predator on white ants, and that is the pangolin. Today China and Korea have 5000 pangolins. It is the only mammal in the world, which has got scales. It's a tiny little thing like this, who only eats white ants. If you lose this predator, you will lose the jungle. But we haven't taken it seriously.

Now I will give you another example. Now as we speak, last month, one person died, of a bite, in Gujarat, and the bite was from a snake which is an extremely vicious snake. The problem is, it's not an Indian snake. It's an African snake, that has been brought and left in the jungles in India. It is a viper, that jumps out trees and bites you. Normally vipers don't and are not predatory. But this one is possibly one of the world's most vicious dangerous



creatures. How did it reach here? There is a man here, who runs a pet shop, here in Mehrauli. He has been in the newspapers, he has been all over the place. He and his partner, who is a politician and an ex member of Parliament today, own the entire wildlife trade in India. What do they do? They use Calcutta port, to import foreign animals, because today, the rich person, everybody has got the same houses, everybody has Italian furniture, everybody is eating avocado and whatever else, so what can they be different in? Animals! So in Mehrauli you go in, and you will find one person is running a factory that is making tables out of zebra skin. How do they get them, we don't know. Another person who has got all the world's birds, a Parsi, he has been raided 20 times, and each time, the Judges have given him protection saying these are exotic birds, we cannot rule on them. There we have a man who runs a pet shop and he only imports snakes, and you get a snake, what the hell will you do with a snake? "*Do daffa galey pe laga diya, ek daffa bache ke galey pe tang diya, uska knot bana diya usko apne dosto ko dikha diya, aur phir uske baad?*" So they go and they get left out. Once you leave an exotic animal out, it has no predators. Therefore it will kill whatever it can kill. And this is what has happened, to the person who got killed in Kutch. Where did the snake go? We took this man to court. The police refused to support us, because, his partner was a member of Parliament from Delhi, who was very important at that time. We were told, give it back. So "*humko dena pada sab kuch wapis*". Till today he runs this pet shop.

What we call, exotic animals "*Vajrikas*", love birds, these are real birds, indigenous birds of Australia. They are brought in the millions, and 20-30% die while catching, about 70% are left, of which 40% die while travelling, and something like 10% ultimately go to the market. Australia is losing little parrot. And when they lose that parrot, they will lose all the seeds, that are spread by this little parrot. Well and we don't take any action because we don't take CITES seriously. Till today your Lordship, we don't have a CITES office in India. We signed this Protocol 25 years ago, we still do not have an office, we still don't know, if I am going to "*shikayat karo*" and act, nobody has touched it so far saying that it is an exotic bird.. what is it? Is it going to create harm to us or not, instead of giving exotics protection, we should apply the same law, but now as a result of that, what has happened? Your average bird seller in Delhi, he is selling owls with fevicol horns stuck to them, why because then they become South American horned owls. He is taking a "*maina*".. not a "*maina*".. what is this bird.. a "*munia*".. which is a grey coloured bird, and he dips it into paint. And when it dries, he sells it as yellow headed kingfisher from Korea. I brought out a book in which I have given you the real bird, and the bird on the market, it's the same bird. We are just taking our indigenous birds turning them into exotica and then killing them. And no Judge rules he asking where is the evidence. But where is the evidence this is not exotic even without the



horns. There are no pet- shop rules. Now we are in Court for the first time. In Delhi High Court, hopefully we will get a judgement which says pet shops have to be regulated. Because I can go today to market, and I can say I want a snow leopard, I will get it. But when you don't have snow leopards any more in the Himalayas, what will you have? You will have an explosion of goats, and then what? So everything impacts you.

Let me give you a case that is still going on. You go to “*Vaishnodevi*”, and many people who are ill, who are fat, who are old, who cannot walk up there choose to take what we call “*khachchars*”. mules or horses. We have done a study, for the last five years, and what have we found? We have found that thanks to these 17,000 mules, of which five die every day, of overwork and exhaustion, we don't know how many people have died in India. There is a disease called glanders. Glanders is a virus which is so deadly, that it's the only virus that was used in the first world war, by Russia against its enemies Germany. It is a biological weapon. It spreads like this. If a horse or mule drinks or eats out of a trough in which any other horse with glanders eats, within one day they get it. Either the horse or the mule dies immediately, or it takes about a year to die. But the mule suffers all the time, and it's veins start coming out. So if you see horses “*jinkey veins nikley huay hein, galey se, aksar aap dikhte ye abdomen mein, tango par*”, that is a glanders horse. So we did a study, and we found that glanders is not anywhere in the world except India and Iraq. And why because in every other country there is a shoot order to prevent it from spreading, so ultimately they have wiped out the disease. In India there is not. So we found that at the moment there is a glanders epidemic going on in Katra, Jammu. So I wrote to the Kashmir Government, and I said please tell me how many horses have got it. So they wrote back and said “*bahut saro ka hein*. And I said *aapne kya kiya hein ispar? Unhono kaha ji Garib aadmi hein isiliye humne kuchch nahin kiya*”. But what happens... forget the horses dying or not dying “*humari bhala s*”e. Glanders affects human being almost immediately. Some old couple, went *Vaishnodevi* come from Orissa, they get onto the horse, the horse that has glanders, they went up, they came down and got the “*bimari*”. They went back they died. It's a 94% death rate. There is no medicine for this. So we have given the figures out. Now let's see whether somebody understands the environmental impact of this.

I could go on and on about these instances. For instance in the North- East everybody was killing hornbills, and using them to make “*topis*”, it was regarded as a great tourist thing. “*Jo bhi tourist waha jaye usko di topi*”. Government tourist centres were even selling those *topis* with the hornbill bill on it. Our Prime Ministers have warned them many times on 26th January, when they are dancing with tribals later on. What has happened? There are less than 200 left. Now what have we found, that the hornbill is the only bird in the world, that can by



itself disseminate ficus trees like peepal. And the 98 ficus varieties are only spread by the hornbill. So now you have no hornbills, so either you go and plant that ficus yourself, or ficus is gone.

Let's talk about two things before I finish. One is dogs. What do we want? We don't want to be bitten. We don't want them to be at your face. We don't want them to be ill. These are the three things that we want. If all these dogs fulfill these criteria then we don't mind that they are alive, but all the time we have to listen to "kitney kuttey hein, kitney kuttey hein". And of course Maneka Gandhi has become eternal because "*koi bhi kutta kisi bhi insaan ko katey kahi bhi desh mein to Maneka Gandhi ko gali padti hein.*". But I am not the problem, I am part of the solution. Thanks to the Supreme Court, they understood when we went there asking for a ban on killing, they listened to it, they listened to the science, environment is nothing but science, it is not about bleeding hearts, people who hug trees, people who love animals, it is not, it is how to save human beings and let them live better lives. So the Supreme Court said, you have to sterilize them and thereafter you have to leave them back in the place they were taken from. This has science behind it. Why do we have dogs in the cities? We have dogs in the cities because they are the predators of all the garbage we throw out. You and I throw out banana peels, uneaten food. This is taken and put into the place at the bottom of the road. You have to have somebody for that. But you don't. So what do you have? You have thousands of rats. They stay underground because they are scared of their predators which are dogs, cats, vultures, and other animals. Now, when two rats make 36,000 rats in one year, now there has been no known way, in which to remove this. Within 6 weeks, a rat, a female rat, gives birth to 6, within 6 weeks those 6 give birth to 6, and you will find rats everywhere. I won't go into their physical functions but how do we know that removing dogs will kill us? Because in Surat, this was tried. Many of you were not even born then. But a collector came to Surat and said "*mein usko saaf kar doonga*" "You remember your Lordship? And "*jab bhi koi collector kehta hein mein safai kar doonga, to mein to mera to dil bahut hi ghabra ta hein*". Because it means two things. "*Ek to wo sare bhikariyo ko nikal dega, doosra sare kooto ko maar dalega*". That's it, "*yeh nahin ki kuch aur karne wala hein.*" So this is what he did. "*Bhikariyon ko maar karke, kutto ko usko sab ko zeher de diya*". Within six weeks, he had killed every single dog in Surat. "*Nateeja? Nateeja yeh hua ki*" within two weeks, there were millions of rats running all over happily in Surat. We have pictures showing millions and millions of rats. And what did they bring with them? Plague. They bit how many people. Some of whom got plague. And that fright spread to all over India. Just in terms of money, how much did we lose, calculate, we had not even one tourist for two years. Not even the Taj Mahal could overcome the fear of plague. One collector in one place removed the dogs. That



is what we call bio diversity, and it's impact. When you remove one species, you will get problems with everything else.

The same thing happened in with Himachal with monkeys. The monkey case is in Supreme Court, but these wretched Himachal doctors, vets, and forest department people, decided, "*ki agar Supreme Court keh sakta hein ki kutto ko sterilize karo, to bandar ko sterilization bhi karna chahiye*". So frightening, so frightening. Monkeys roam in families. "*Dada, Dada, Nani, Nana, Chacha, Chachi, Par Dadi, aur char pach dost, sab ek saath ghumte hein*". Now Himachal Pradesh is paying 500 rupees for every caught monkey. Monkeys are caught by beating. Now you have to catch the whole family of monkeys, but if you catch one, or two members of that family, what happens. Rest of the family runs off, leaves the territory, and goes into a new territory. Where it is competing for food with yet another group. And the two that you catch, you have broken their limbs in the mean time, now you sterilize them. Having sterilized them, you use the Supreme Court judgment on dogs, to release them back to the same place. But when you release them back to the same place, their family has disappeared. They will go straight into a human house, and they will open fridges, they will bite you, they will tear your clothes, because "*atyant gussa*".. anything anything.. They have no idea how to get food, and that new group that has gone into a competing area, they will also go into houses. Did you know that in 1980 a census was taken, in which there were 87 lakh monkeys. Today there are less than 5 lakh. When they were 87 lakh we didn't have no problem with them. "*Koi Kissan shor nahin machata tha.. Humare yaha aa gaye humara sub kuch kha gaye*". Today all 5 lakh are sitting in villages and towns. Why? Because of one order that went out in 1983, saying no fruit trees can be planted in forests. Why not? Why not? And secondly, an even more vicious order, which has been there for years, a law, which the British started when India was massively forested, which is .. "*shayad garmiyon mein aag lag jayegi*" so to prevent "*aag*" from spreading, every forest department has to dig a trench, in front of the forest, put leaves into it and set them on fire, so that there is a sterile area. So that when people passing by throw "*beedis*," or cigarettes, it doesn't spread to the forest. This was the thinking behind it. Now what is happening? Government of India, gives 25 crore rupees, to various people, rangers, at the lowest level, to dig these trenches every year. Why should you dig a trench every year? This is regarded as pocket money by the forest department. So you don't dig trenches, you don't do anything, but every year in January, February, you set fire to the forest, to conceal the trees that the forest department has illegally cut. Now these small forest areas would never have caught fire in the hot season, by themselves, because they are too small, for that friction to start, but we take away all the undergrowth, the new shoots, the new trees, the bushes, as a result, the monkeys, the snakes, ,



the “neelguy”, their predators, they’re all in human crops and habitation. So if we were to simply allow forest to grow fruit trees, if we were to simply stop fire lines, you would not have the monkey problem within one year. You would not have a “neelguy” problem, you would not have a wild boar problem. But the acts are being opposed from being stopped by the forest department, because that means less money in their pockets, that is a part of it, anyway. I could go on forever, explaining why we do what we do with animals, and why laws and courts need to understand, it is not about animal loving, I work for old people, for instance. I don’t say I love them, I work for them, because they deserve as much right as anybody else. I don’t love animals, I work for them because it’s the only way we can survive. Every time we lose an animal, we lose our quality of life.

I’ll just give you one story and finish off, and thank you for your patience. Mauritius was an island, with a bird called the Dodo. The dodo is a duck, or was a duck. Mauritius was the most economically advanced country about five hundred years ago. And the reason for that was, they had a tree called Calvaria major. Calvaria major has got the hardest wood, in the whole world, and the ships were being made out of Calvaria major trees. Now what people would do is, the nations coming to the middle east, to China, to India, they would all stop in Mauritius, spend about six months there, and get their ships repaired, or new ships made. All the Portuguese ships were made there. So that basically the Mauritians had to do nothing, they simply had to cut down a tree, and make a ship, cut down a tree, make a ship. Now all these foreigners used to stop there. Monsoons came, they would wait, their ships would take time to get built or repaired. The Portuguese stopped, every time they stopped they wanted to eat meat. Now islands have not got goats and other indigenous cows and stuff because they’re islands. This island had the Dodo. So the Portuguese killed and killed and killed the Dodo. And the Mauritians said nothing. “*Dekh chidiya hi to hein, mar gayee to mar gayee aura aa jayenge*”. One day, there was no Dodo. End of problem. So there were no Dodos left, the Mauritians said Oh we’re very sorry, doesn’t matter, God will send something else. Within two years they discovered, no more Calveria major trees either. Because they found that the only way that the Calvaria Major tree would grow is when the seed passes through the body of the Dodo. From then to now, India, China, America, Singapore, Scientists, all these people have sent birds after birds after birds to Mauritius. “*hum logon ne mene, tote, batakh*” we have sent them hundreds of birds “*ki wo jo beej bache hain*” let the birds eat them and find out whether now it would be fertile? Nothing!! Result, Calvaria major, “*wo katate gaye, katate gaye, katate gaye*” they were not planting them. So they didn’t have any trees. When they stopped Calvaria Major trees their entire economy collapsed. People stopped stopping there. They had nothing else to trade so what did they do then? They had



nothing to do. So they said lets grow suger cane. so they came to India. They started sugarcane plantation, but none of them were fit to work. None of them had worked in their lives. “*Sab log ameer the.*” So they took labor from Bihar and they took them to Mauritius. But the “*Bihari*” culture is so strong, that its language, attitudes overtook the local culture very quickly. So Harrold Walter within 200 years became Hari Ram Ghulam. And the language changed from French and Creole to a kind of weird Hindustani. So everything there changed. Their attitudes, their economy, their culture, their language, everything changed. Why because one bird died.

And that’s what happened with us. The vulture has disappeared. What has it done, it has taken whole “*Parsi*” religion with it. Every religion is based on birth, marriage, and death. Is that right? The rituals! If you remove one of them the others start collapsing. The “*Parsi*” ritual at death is that you put them in the Tower of Silence, and let the vultures feed on them. There are no vultures. So now they have to go for cremation. So it is a matter of time that they become more Hindu or something else because their rituals have disappeared. Because of this one bird. Apart from that every village has got 10% to 20% more sickness because every time an animal would die the vultures would come in and in fifteen minutes “*saaf suf karke nikal jata. Ab kutta mar gaya toh pada raha, gaaye mar gayi toh padi rahi.*”

So think what does biodiversity mean? It is simply a “*Kavach*”. The more bio diverse you have, the more protected you are by nature. The layers that you peel away, you simply expose your own naked body to the elements and that is when we should be protected by laws. When you go and learn laws about animals, about biodiversity, think about it seriously because they are the most important laws.

Thank you very much!



Vote of Thanks

Professor (Dr.) Kamala Sankaran
Professor, CLC

What a lovely start of this conference on biodiversity and sustainable development. I think all the speakers on the stage have highlighted in so many ways, and more ways in which we as teachers in law faculty could perhaps have said. A particular thanks to our lovely inaugural address by our Chief Guest Mrs. Maneka Sanjay Gandhi for bringing out

in so many ways the importance and interconnectedness of our environment and really the duty of human beings, law students and law teachers here and the role that we should play in protecting the environment. I request all of you to give our Chief Guest a big hand once again.

Our special thanks to Hon'ble Mr. Justice A.K. Patnaik, for coming here, and we know Sir that you have been a member of the Green Bench and your address here was heard very closely by all our students and teachers here. I also wish to say to that one of the judgments that he delivered as a Constitutional Bench member in *Pramati Educational and Cultural Trust* is part of our constitutional law syllabus because it is the judgment on the constitutional validity of Article 21A and Article 15, sub clause 5. It is the leading Judgment on that point and you were the author. So thank you Sir. I request all of you to give a big hand once again.

And also a very special thank to Prof. Koh Mun-Hyun, we are really honored Sir that you have come all the way from Korea and your knowledge really brings extra light on to our seminar.

Our thanks also to all the people who are sitting here. I thank Professor Usha Tandon who is the Conference Director and also our PIC. We thank her on behalf of Campus Law Centre for putting together this international conference and giving it a meaningful direction. Thank you to both Prof. Koh Mun-Hyun and also to Prof. Usha Tandon. I request you to also



please give a big hand to both of them and thank you to all the delegates. The delegates are also from, of course India, but also I noticed from program today, that they are also from South Africa, Nigeria, Algeria, Bangladesh, South Korea, Mauritius and Uganda. So we are very very grateful really to all of you for being present here and I think we would learn a great deal from everything that has happened.

So on behalf of CLC, the conference, organizing committees and on behalf of all the colleagues, and students who are sitting here, a very big thank you to all of you in the inaugural session.

Thank You !



Valedictory Session



Welcome Address and Closing Remarks

Professor (Dr.) Usha Tandon

Professor-in-Charge, CLC & Conference Director

Hon'ble Mr. Justice Ranjan Gogoi, Judge, Supreme Court of India, Hon'ble Mr. Justice Uday U. Lalit, Judge, Supreme Court of India, Respected Mr. Mohan Parasaran, Senior Advocate, Supreme Court of India, Mr. Siddharth Luthra, Senior Advocate, Supreme Court of India, Prof. Raina, Mr. S.K Gupta, very distinguished guests present here, delegates, my distinguished colleagues and dear students, I am very delighted to welcome you all again, this time, at the Valedictory Session of the three day international conference on Biodiversity and Energy.

We are honoured to welcome Justice Ranjan Gogoi, our Chief Guest who is here with us to close this mega event with his Valedictory Address. Justice Gogoi has been elevated to the Supreme Court of India in 2012 and has given many landmark judgements on Environmental Law, important one of which is that relating to Orissa Mining Corporation v. Ministry of Environment and Forest. As we have been discussing in the last session that environmental law cases come out in the series of orders rather than one time judgment, (I was aware of 10 to 20, Sanjay told me 500 or so), here the order which I am talking about is of April 2013, wherein Justice Gogoi has highlighted that the beginning to protect the Environmental Law was initiated by the Apex Court, when it put curbs on mining operations in violations of Environmental Law. Well, I found something new in his concern for the protection of Environmental Law and that is that one slogan which he has given us of "Inclusive Environmental Growth". We are well aware of, perhaps too much aware of, the expression "Sustainable Development" and we were having a discussion where Dr. Pushapkumar was saying that sustainable development at the end of the day is the development which goes for the economic development, but as I see this inclusive environmental growth, it gives a new



dimension to the environmental protection with component of, as mentioned by Justice Gogoi, 'selfrealisation'. When we are talking about selfrealisation, we are talking about the contribution of all of us sitting here. I am also reminded and connecting it with the opening remarks of Mrs. Menaka Gandhi when she told us that how insensitive we are to the environment. So this new perspective may take us quicker and better to protect the degradation of the environment. Justice Gogoi has been on the Bench of the Supreme Court since a long period of time and he will be there for another long period and he is very much in line to become the Chief Justice of India very soon. Justice Gogoi, I am told, devotes his maximum time, out of the court, for judicial work and research. Things for him means business, work is worship for him. He is known to be a very disciplined, strict and regimented kind of a person. Getting His Lordship as the Chief Guest for this event is one of our real achievements and I extend you Sir a very warm and hearty welcome on this occasion!

We are privileged to have Honourable Mr. Justice Uday U. Lalit with us as a Special Guest of Honour. Justice Lalit has been appointed as the judge of the Supreme Court of India two years back in 2014. Hailing from Maharashtra, he joined the Bar there in Mumbai in the year 1983. He was designated as the Senior Advocate by the Supreme Court in 2004 and was directly elevated to the Supreme Court in the year 2014. My research team has given me some of the orders regarding environmental protection delivered by Justice Lalit. One of the orders which is hardly one month old is regarding the reiteration of right to land to adult sons of farmers, affected by the Sardar Sarovar Project. Before joining the Bench of Supreme Court, Justice Lalit has been appointed the *amicus curiae* in various forest cases such as *T.N. Godaverman* case. Justice Lalit is a very nice and a humble person. Before this, I have had one meeting with His Lordship at his residence, when I had gone to invite him and the kind of warm welcome which was extended to me, believe me, is very rare which we poor Professors get from the powerful Judges. I extend you Sir, a very cordial welcome on this occasion.

Well, it is always a great pleasure for me to welcome Mr. Mohan Parasaran, Senior Advocate, Supreme Court of India and an accomplished lawyer in the field of International Taxation Law, Arbitration Law and other laws. We know that he has been the Solicitor General of India and before that for a long period of time, Additional Solicitor General of India and therefore he has dealt with not only International Taxation Law which is his favourite area, but practically all other kind of the cases that had been thrown at him by the Government. His academic interest takes him not only to this conference but also to National Judicial Academy to give lectures, to FIT Foundation and many other foreign conferences.



My colleagues and my students know that this is the third international conference which we are holding. Organising a conference of this level involves a lot of things. One of the important things relates to finances. We have been fortunate to get that support from Mr. Parasaran. He may not be soft hearted, but certainly, he is a kind hearted person. You already have enjoyed that Welcome Dinner hosted by him at India International Centre. Apart from that he has been kind enough to host some other events too. He is not only rich and powerful but generous and virtuous too. Sir, I am really falling short of vocabulary to thank you on behalf of Campus Law Centre and welcome you on this occasion from the core of my heart.

It is my another pleasure to welcome Mr. Sidharth Luthra, well, I should be saying our own Sidharth, who has been helping us in many ways for the organisation of this conference. He has already established himself in the field of criminal law. We know that he has also been running that international moot court competition i.e. K.K Luthra Moot Competition, in the memory of his father which is giving exposure to so many young budding lawyers. His academic interest had taken him to Northumbria University, U.K. and he was supposed to come tomorrow but when I insisted for his participation in this conference, he preponed his flight running financial loss to give you people the benefit of his wisdom. A very warm welcome to you Sidharth!

I am very glad to welcome Professor S.C. Raina and Mr. S.K. Gupta. Both are my senior colleagues here. Professor S.C. Raina is a well known scholar in the area of Criminal Law and the Law of Evidence. Mr. S.K. Gupta is a very popular teacher in subject of Family Law. He has also been my teacher. I am delighted to welcome both of them.

I take pleasure in welcoming Mr. Sanjay Upadhyay, Mr. Naushaad Ahmed Khan and other distinguished guests who are present here. We could not have reached at this particular stage until and unless delegates from various parts of the world and India had taken pains to come to Delhi to make their presentations. Very warm welcome to all the delegates.

I welcome the office staff, particularly Mr. Hasija, my student volunteers, who are really creating wonders. And, now my colleagues, two of the colleagues I have already mentioned but some of the colleagues I would really like to bring them to the Lordships's notice- Moatoshi, Akash, Anju, Harleen, Cheshta, Aash, Mayank, Monica and all members of Sub-Committees wherever you are please rise. I request you to give a big round of applause for all of them because it is they who have done the work, I have just instructed. So a very loving welcome to all of you.



As the Conference Director, in the closing remarks, I would like to mention that our Chief Guest of the Inaugural Session Mrs. Menaka Gandhi set the ball rolling when she extensively spoke on the conservation of biodiversity from the point of view of animal biodiversity. Various Technical Sessions, by the God's grace, went very well. There was no default at all. All Chairpersons conducted the sessions very well. I am thankful to the delegates for adhering to the request that I made in the Inaugural Session to keep their presentation within the time, thus leaving time for Observation and Question & Answer round. Whatever I had thought of was really implemented by you. A very cosy welcome to all the delegates again.

One thing I would like to highlight about the conference. You know that we had two sub-themes of this Conference i.e. Biodiversity and Energy. When we opened the Call for Papers in September, last year, my senior colleagues/friends in other Universities, who have gained expertise in Environmental Law, congratulated me for including Energy Law. For instance Professor C.M. Jariwala told me that in India the topic of energy might have been discussed in other disciplines, but it hasn't been discussed in any of the legal conferences in India. I was unaware of this statistic. I picked up the Energy Law because it was one of the upcoming areas. Thankfully, we could make one full session on Energy Law. When I got to know this kind of importance of holding discourse on Energy Law, I made myself the Chairperson of that session, to know more the real issues in Energy Laws. All the papers presented in this session were immensely enlightening. We had wonderful kind of ideas coming up. One of the speakers, Chandralekha, related energy laws with trade issues, another, Nikita related it with IP issues. One excellent paper presented by Shreeyash Lalit was on a Dutch judgement wherein the Netherlands court has imposed liability on the government for the tort of negligence, as the government had not been able to fulfil the obligations to reduce the requisite percentage of carbon dioxide gases.

Friends, not many years back, all of us have heard one statement from one of the former Presidents of India, which became very popular because of its simplicity. That statement is "Dream Big." You must have got whose statement it is- Dr. APJ Abdul Kalam. When I took over as the Head of the Campus Law Centre, I tried to experiment this motivation from our President and I dreamt "more space" for CLC. However, we witnessed the reverse of it happening. Whatever little we were having, that was also tried to be taken away from us. In this context almost one year back in Feb. 2015, from this platform only, I made a wish that if CLC would have another Conference, next year, that Conference should be at this venue and in this Auditorium. My dream might not have come true, but my wish has certainly been



fulfilled. You know who made that wish come true? Two of them are sitting here –Mr. Mohan Parasaran and Mr. Siddharth Luthra, the considerate *alumni* of CLC. Please give them a big hand for the celebration that we are holding this conference here in this Auditorium, big hand, for the success that we have been able to retain this Auditorium.

Well I haven't told you, still, the most beautiful and important part of my speech. Want to hear that? Then be ready to give a big round of applause to Justice Ranjan Gogoi as being the cherished *alumnus* of Campus Law Centre. Very special welcome to you Sir on this occasion for coming back to your *alma mater*. Now we look forward to hear our distinguished dignitaries and I wind up my address by welcoming you all again.

Thank you!



**Address by
Guest of Honour**

Mr. Sidharth Luthra

Senior Advocate, formerly Additional Solicitor General of India

Justice Gogoi, Justice Lalit, Mr. Parasaran, Prof. Raina, Prof. Tandon, Prof. Gupta, all the faculty members and the delegates, I think the only qualification that I have and don't know where Prof. Usha Tandon figured it out from, to speak on an

occasion like this is that I am the grandson of a farmer. I must say, I grew up on my grandfather's knees and he was always telling me about the link we have as human beings in maintaining biodiversity and the sensitivity we must have towards our environment. In fact, I have seen him being conscious from the beginning. He was born in 1900 and till I saw him in 1993, I would go to him on the farm and he would tell me that we have to control the use of pesticides, we have to ensure the impact on the insects, the impact on water and he was always very sensitive.

Today, I was reading an article in the newspaper about the loss of vultures in India. If you remember, and I don't know how many of you in and around walking in Delhi in the last two or three decades, I remember in Lodhi Garden there was a whole stretch of trees where there were vultures, none of them are to be found today. And, the reason is that, there is a medicine called diclofenac, which we also use as human beings - a painkiller, given to animals as a result of which we have almost destroyed the vulture population. The government interestingly has worked out through mathematical studies and say that the cost of breeding a vulture is about 6 lakhs and once you breed a vulture and you have x no. of vultures, it is 75% of the cost of creating a unit for carcass disposal, for animal dead bodies disposal and that cost comes with an energy cost. So, today the government is seriously considering and administration has recommended that perhaps it's time that at least in the rural areas we go back to the traditional methods to breed vultures and try to provide them with an



environment where they are safe and so we can save the infrastructure cost and the cost of energy and disposal of energy.

In another interesting example, today I was walking with someone who gave me an interesting insight. An hospital in Delhi covered its open air parking lot with solar panels so they get free electricity, they have excess electricity that goes back to the grid and the vehicles remain cooler and if the vehicles remain cooler in the summer, the use of fuel is much lesser due to lesser use of air conditioning. All these mechanisms of reduction of power as also of insuring that we move to clean fuel are both parts of sustainable energy and of course protection and conservation of our biodiversity.

Now, while all these things are considered, we must also not forget that even clean energy perhaps may not be as clean as we want it to be. It may be clean from the pollution point of view but it has its own concerns. For example whether its air, water, sun or wind energy, there have been studies done to say that a dam on a river has an impact, when the level of dam is raised then the impact it has on the life within the water. With wind turbines- when you think of wind turbines it's a perfectly harmless kind of energy- there is a turbine its swinging in the air and there can be no damage to the environment. Yet studies have indicated that there is an adverse impact on birds and bats who are hit by it very often and there is a recommendation in some of the studies that I was reading this morning, that we must construct wind farms either away from breeding colonies of birds or ensure that artificial breeding colonies of birds are not placed near wind farms and wind turbines.

These are all the concerns which I am sure you debated over the last few days and as a matter of interest what has happened in this conference is something which is of great importance to all of us. To end, I remember and I would like to quote the famous judgement of *Sachidanand Pandey* in 1987 wherein Justice Chinnappa Reddy quoted a portion from the "wise Indian Chief of Seattle" stating "Every part of the earth is sacred to my people. Every shining pine needle, every sandy shore, every mist in the dark woods, every clearing and humming insect is holy in the memory and experience of my people. The Sap which courses through the trees carries the memories of the red man....This shining water moves in the streams and rivers is not just water but the blood of our ancestors"

Thank you!



**Address by
Guest of Honour**

Mr. Mohan Parasaran
*Senior Advocate, formerly
Solicitor General of India*

Esteemed and Respected Hon'ble Justice Ranjan Gogoi, Esteemed and Respected Hon'ble Justice Uday Lalit, my dear friend Mr. Luthra, Dr. Prof. Usha Tandon, Prof. Raina , delegates of this

conference, other members of the faculty and my dear students, once again it gives me very immense pleasure to be here for the third consecutive year. This time, CLC has held another important international conference on a very important topic for the last three days and I congratulate Prof. Usha Tandon and her team for holding such conferences. In fact, conservation of biodiversity, development and generation of sustainable energy are two very important facets of tackling the pervasive and worrisome phenomenon of climate change. Growing industrialisation and technological advances have provided all the necessary and unnecessary comforts we seek. Incredible damage has been caused to our environment due to various activities such as deforestation , habitat degradation , poaching , unchecked mining , use of fossil fuels and irresponsible waste disposal etc.

Though many of us don't realise it, our existence is intertwined with flora and fauna surrounding us. The drive for biodiversity conservation is not merely for aesthetic purposes but for the greater purpose of maintaining ecological equilibrium and productivity. According to the information published by the interim secretariat for the convention of biological diversity, while preparing environmental strategy on specie extension they also have acknowledged the imprecations of loss of biodiversity for social development and as Mr. Luthra was giving the example of vultures , I was wondering that these days we are not able to spot a single parrot or sparrow in any city or even in villages and so many species have disappeared. At least 40% of the world's economy and 80% of the needs of the poor are



derived from biological resources. In addition, the richer the diversity, the greater the opportunity for medical discoveries, economic development and adaptive responses to such new challenges as climate change. The biodiversity is our insurance policy, our own lives and livelihood depend on it. Human activities have caused loss of natural habitat leading to displacement and extinction of a variety of flora and fauna which in turn has affected our own requirement of food, drinking water, shelter and medicine. Now recently, we saw a leopard attacking some people in a school on the outskirts of Bangalore and a seven year student of the same school is reported to have said *“we are destroying their homes- the forests- that is why they have come here and it isn’t their fault”*. This indeed is a sad state of affairs that a seven year old school goer realises this severity of situation and yet we as adults continue devastated destruction of the environment.

Entire lakes and runlets in Chennai have disappeared due to haphazard and illegal constructions in the name of progress and development and that was in fact the main reason for the resent havoc which Chennai witnessed and also Srinagar witnessed that same phenomenon last year. The aquatic ecosystems in Chennai have totally been destroyed; result of these actions was evident last year and is even evident now. And we see several cities also at the same time suffering from other problems as well, including state of Maharashtra from drought and this all because unabated use of minerals and fossil fuels and unchecked disposal of toxic waste that has created a figurative bubble of poison that is just waiting to burst one day. In Delhi itself the quality of air we breathe is actually toxic and in fact both the executive as well as Supreme Court have been trying their level best for several years to find out various remedial measures. It led to the Honourable Supreme Court passing an order imposing green taxes, odd-even rule imposed by the Delhi government.

We desperately need to turn to alternative sources of energy on a far wider scale- solar energy and wind energy , hydro power, non polluting fuels such as CNG etc. These ought to come in the mainstream, while the use of fossil fuels and other pollutants need to take a backseat. We require comprehensive and large scale awareness drives for the cost effective and easy utilisation of these alternative energy sources. This task cannot be left to the Government alone, all sections of the society particularly the private sector need to participate. We need our businesses and investors to promote R&D in this sector to just ensure continued innovation for development and generation of sustainable energy. Corporate entities must comprehend the magnitude of the problem and seek to contribute towards its resolution. When the Jaguar Land Rover’s CEO Ralph Speth, recently remarked *“that their cars of latest technical features can clean the air in Delhi”* the statement was



immediately and rightly slammed by the concerned authorities including the Court.

The Supreme Court has stressed the importance of sustainable development in many cases resulting in the evolution of a special branch of environmental jurisprudence and judicial recognition of the precautionary Principle, Polluter Pays Principle and Intergenerational Equity. The National Green Tribunal has often come down heavily on industries for sidelining environmental concerns while entering commercial activities. With the repeated concerns expressed by our Courts , it is high time that we as citizens recognise the magnitude of the problem we are facing and take steps to fix the damage that has been caused. Once again, I wish to congratulate the Campus Law Centre in holding such conferences on these important topics which will be so useful for future.

Thank you!



**Address by
Special Guest of Honour**

Hon'ble Mr. Justice Uday U. Lalit
Judge, Supreme Court of India

Justice Ranjan Gogoi, Mr. Mohan Parasaran, Mr. Sidhtharth Luthra, Prof. (Dr.) Usha Tandon, Prof. Raina and Prof. Gupta, all the delegates who have come for this conference, the faculty, the students, ladies and gentlemen, there is a personal reason why I am here. Yesterday I had gone to ILS Law College Pune, that's the college where from my father studied, today I am in the college where my son is studying. It is something like an intergenerational equity, which is the scientific principle of Environmental Law.

You heard Mr. Sidhtharth Luthra giving you the insights on that Indian Chief's lovely poem which is extracted in full in Justice Chinnappa Reddy's judgement in *Sachidanand Pandey*, that to my mind is the Preamble to Environmental Law. The age old wisdom of that Indian chief sums up everything we need to do on the environmental front. The first principle in the Rio Declaration is also very touching and sums up the matter very beautifully. It says "human beings are entitled to a healthy and productive life in harmony with nature". The emphasises on harmony with nature essentially sums up the Sustainable Energy or the Sustainable Development for biodiversity. I was appointed *amicus*, I was one of the *amicus* members of the matter in *TN Godavarman*. It was in 1996 that we were appointed *amicus* and the matter continued till my elevation i.e. for 18 years. Variety of problems, variety of issues, have dealt with, but I will place before you four or five matters which have been dealt with by the Supreme Court, and are milestones in this branch of law.

The first one, of course, is the judgement in *Dehradun case*, where Justice Rangnath Mishra speaking for the Bench banned all mining activities in Dehradun valley which were essentially limestone quarrying works. It was all licensed work but the tremendous effect of



mining operations in Dehradun valley was that the water tables were diminishing and affecting flora fauna and animal life. Therefore under the orders of the Supreme Court it was completely prohibited. That's one case that actually shows the tremendous awareness in this context.

The second one is *T.N. Godaverman or Kudremukh Iron Ore Company's case*. Kudremukh was a public sector undertaking. All leases were lawfully granted. It was a public sector undertaking which was doing excellent mining work. It was a profit earning company, but because it was having tremendous adverse impact on the entire environment causing tremendous damage to the flora and fauna in the vicinity, therefore again Supreme Court stepped in and banned the work as a result of which the entire Kudremukh Iron Ore Company had to wind up its operations. So look at it this way the two cases actually show us the impact that perhaps the judicial intervention can achieve for the protection of environment.

The third case is about the buffer zone. There are various reserve forests or national parks which are the habitat of animals, birds or even the reptiles. If there is no buffer zone, if the civilisations were to touch the borders of that reserve forest, then as Mr. Mohan Parasaran said, citing the case of tiger, the animals are bound to come into your territory. The concept of buffer zone, though it was known, but was not getting implemented. The Government said default buffer zone can be 10 km. Imagine a bird sanctuary in Delhi or Sultanpur, or Okhla bird sanctuary in Noida, if you were to go 10 kms away then there won't be any development around. You need to do the study, check the life, habitat, the lifestyle, the behavioural pattern of the animals and the birds and then come out with an expert analysis on the ideal buffer zone

Coming to the fourth case, in which I was also one of the *amicus* is vehicular pollution case. If you check the DTC buses they proudly proclaim world's best environment friendly fleet. I remember those days prior to the insistence of the Supreme Court in the matter we used to have air full of carbon and soot. The Supreme Court insisted upon complete change over from normal diesel to CNG fuel. As an *amicus* at one stage we felt that perhaps the public pressure of inconvenience is mounting, but the Supreme Court stood firm and I must say that I am proud of that, the reason is for you to see that today the entire fleet in Delhi has actually turned to completely environment friendly fuel.

Now, the last one and that is of course the famous *Span Resorts case*. What happened was that one resort on the banks of Beas in Himachal wanted to change the course of the river so that it becomes very friendly for the tourists there and it will be saved from floods that might



occur in the river. The judgement is something like an eye opener. It actually acknowledged for the first time what we call in Environment Law the Public Trust Doctrine. The Judges said that no citizen has a right to change the course of a river and that's exactly the echoing sound of that Indian Chief's whole poetry. That small poem which was found in *Sachidanand Pandey*, telling that that all these are assets of the society, and going by the Public Trust Doctrine everyone of us has say in the matter, not just say, it is also our duty to protect that.

Go by that duty to protect and that is what I'll end my speech on.

We all Indians in our national anthem give salutations to two rivers – Ganga and Yamuna. What have we reduced our rivers to? Have you ever seen any capital cities like Budapest, London wherever there are rivers that flow through the capital; they are so beautiful that they use their rivers for river transportation, for sports, for recreation. Today ask any Delhite he won't even like to go anywhere near the river. When it enters our Delhi the river is absolutely perfect. Eleven kms down the line when it flows out of Delhi at Okhla it is reduced to the level as a sewer. What have we done? We are actually dumping all our untreated solid waste into the river. If we go by this, the Public Trust Doctrine demands that we must actually stand up and save our rivers, save our mountains and save our forests.

I will just tell you one small instance when we started *TN Godavarman*, the Bench was Justice Verma and Justice Kirpal. Our first hearing went on for three weeks. All the States were issued notices, all the conservators of forest were there in Supreme Court (the conservators only disclosed themselves later, was an eye opener for them). As a pure forest official his perceptions are completely different. If you have seen Indian Forest Act, 1927, it contains nothing but exploiting the natural wealth. The Forest Conservation Act which came sometime in 1980, changed the perception onwards but those who have been brought in the forest service their thinking, ideologies and perceptions are still the old ones and when they came here, they actually went with a completely different perspective in the matter. One of the conservators told me *"that a fallen tree in the forest was taken as the forest wealth to be used, utilised and sold. After that three week long session in Supreme Court, I have now found that if a fallen tree in the reserve forest is left the way it is because that fallen tree can be an abode and habitat for animals like rabbit, it can feed multiple organisms"*. And that is nothing but biodiversity.

Thank you so much!



**Valedictory Address by
Chief Guest**

Hon'ble Mr. Justice Ranjan Gogoi
Judge, Supreme Court of India

My esteemed colleague Justice Uday Lalit, Prof. Tandon, Prof. Raina, Prof. Gupta, Mr. Parasaran, Mr. Luthra, members of the faculty, the organizers of this conference, the participants, my dear students, let me begin by thanking Prof.

Tandon and other members of the organizing committee for inviting me. I am happy to be back to where I belong to. This is one place where I come from. I sincerely believe that judges should normally speak only through the judgments, but for the Campus law Centre, I make an exception. This is a great institution. I have come to know that Mr. Parasaran and Mr. Luthra are the support pillars of this institution. Mr. Parasaran and Mr. Luthra, please continue your support.

This is a nearly 100 year old Law College established in year 1924. It has been the nourishing ground of some of the most eminent legal luminaries of the country. Some of them are judges, some of them are active legal practitioners and some of them are active in public life. The Law Faculty of this university of which the Campus Law Centre is the flag bearer can boast of a multi lingual and multi-cultural student body, imparting legal education on the basis of the case study method. It has withstood all challenges of time and continues to occupy a place of pride in the field of legal education in the country. It is credited with not only imparting high quality legal education but is an acknowledged centre of continuous learning, a fact-evident from the present conference which has been successfully organized by the continuous and untiring efforts of all concerned. I compliment the Campus Law Centre on holding this conference on a topic of unparallel importance over the entire humanity.



Mankind today is facing a herculean challenge to check the unrestricted exploitation of natural resources, resulting in biodiversity degeneration. Biodiversity is essentially the DNA of what forms life on the planet. The International Union for Conservation of Nature (IUCN) defines 'biodiversity' as the foundation of life on earth. As we expand our influence over the world, we must also be careful to simultaneously protect and preserve the environment around us. The loss of biodiversity cannot be computed in terms of money, it is an invaluable asset that nature has bestowed on mankind on which there can be no price tag. This is the essence of the Public Trust Doctrine that brother Lalit had talked about.

It is my personal opinion and I repeat it is my personal opinion- an opinion formed on what I believe to be relevant statistics- that we always wake up a little late to address all pressing issues that concern mankind, be it pollution, be it environment, be it ground water, be it any other needs of mankind. It is only in the year 1992 that comprehensive legally binding treaty namely the 'Convention on Biological Diversity' (CBD) came into being. 196 countries are the parties to this Convention which for the first time recognized that conservation of biodiversity is a common concern of mankind and an integral part of development. Similarly, it is again in the year 1992 that the UN General Body acknowledged climate change as a common concern of mankind. The over dependence on fossil fuel and a need to explore the methods of finding sources of sustainable energy gain momentum. However, to produce sizable amount of sustainable energy, large land sites are required and care is to be taken not to exert pressure on biodiversity

Out of 9 topics that had been slated for discussion in the various working sessions in the last 3 days, some are broad and general, a few are very focused on intricate issues. All such topics have been well thought out and I am told that they have generated meaningful discussions and presentation have been of a very high order. Two of these topics which are linked to the progress of developing nations, namely "Biodiversity and Poverty Eradications" and "Biodiversity and Gender" have attracted my attention. Therefore let me specifically deal with the same, though very briefly.

The forest enables the indigenous communities to conduct activities such as gathering firewood, preparing charcoal, collecting materials for making handicrafts etc. These are the means of livelihood of these people. The effect of degradation of environment is thus felt by these communities which directly depend on such natural resources. Women in developing countries play a significant role as primary care takers and natural resource managers. The preamble of CBD recognizes the vital role that women play in the conservation and sustainable use of biological diversity and affirms the need for participation of women at all



levels of policy making and implementation. Ironically these are the communities whose opinions are not taken into consideration while devising strategies and policies for developmental projects.

An example- where the affected communities were empowered to decide the fate of a development project was when the Supreme Court of India in *Orissa Mining* case decided that the tribal community through the Gram Sabha should determine whether the proposed mining project by the Vedanta Group in Niyamgiri Hills should be allowed. Pursuant to the decision, the Gram Sabha of 12 villages falling within the mining zone, unanimously rejected the mining project. India is one of the 17 mega diverse countries of the world, accounting for 8% of the global species despite having only 2.5% land area. The Biodiversity Act, 2002 was enacted in furtherance of India's ratification of the CBD. Under the Act, several activities related to the conservation of biodiversity have been adopted, including the National Biodiversity Action Plan, 2008. However, the Act has been criticized and perhaps, rightly as not being a comprehensive legislation. In particular the lack of representation of conservers, creators and knowledge holders of biological resources on the panel of the National Biodiversity Authority has been highlighted.

In addition to this, there are other legislations like Wildlife Protection Act, The Forest Conservation Act which overlap on the aspect of conservation of different facets of biodiversity. The need is to have an all encompassing legislation to ensure effective implementation of all policies and strategies as may be devised. Some notable human efforts and policies for conservation of biodiversity will require a specific mention. In October, 2010, parties to the CBD adopted a strategic plan to tackle biodiversity loss. The strategic plan comprises a vision for 2050, a mission 2020 and 5 strategic goals which *inter alia* include reduction of direct pressure on biodiversity and enhancing the implementation thereof through participatory planning, knowledge management and capacity building.

Internationally speaking Costa Rica's Biodiversity Conservation Policy is based on 'Save, Know and Use trilogy of principle'. 'Save' means protecting representative samples of the country's biodiversity through a system of protected areas, 'Know' means knowing the biodiversity that exists in the country and particularly in the protected areas and 'Use' means using sustainably the biodiversity for the social and economic benefit of the country. An innovative initiative in promoting public – private Partnership is reflected in the Amazon Region Protected Areas Program, which was started in the year 2003 by the Government of Brazil in furtherance of the pledge taken to triple the protected area of Amazon basin. We also need to appreciate instances where pros and cons of a development project have been



weighed before giving them green signal. In Mexico the Government cancelled the plan to build the world's largest Salt water plant on the shores of San Ignacio Lagoon a pristine breeding area of the Gray whale and UN designated world heritage site.

A similar example can be seen in Nepal where the proposed Rapti River Diversion Project in the Chitwan National Park, a house to about 400 one horn rhinoceros characteristics of South Asia, was rejected and this world heritage site was preserved for the benefit of the future generation. Human efforts have shown encouraging results. In California the decline of small sea birds called the 'Liston' began in the late 19th century due to the desirability of the feathers of the birds for women's hats. When listed as an endangered species in 1970s just 225 numbers were record in California. Active predator control programs, protection of nest species from development and disturbance allowed the species to steadily increase to about 6500 in 2010.

Near our home, we have example of a specie which became extinct namely the "Pygmy hawk". A captive breeding program was implemented in my home state Assam and you will be glad to know the specie is now recorded at an encouraging figure of 200. It is indeed inspiring. Presently, our planet is facing an escalating loss of species across the natural environment at roughly about 1000 times the natural rate. Biodiversity hotspots are meted to identify those regions of the world where attention is needed to address biodiversity loss and to guide investments in conservation. Today, nearly, 20% world population live in biodiversity hotspot, making it more important than ever to remember that every human action would have a reaction on the ecosystem. In order to ensure the protection of biodiversity, not only an effective legal-framework is paramount but also a conscious society which realizes the significance of this natural gift is needed. The effects of continued destruction on biodiversity are not confined to the national boundaries and thus, call for a collaborative effort internationally. I compliment the organizers, the participants and the faculty of the Campus Law Centre for the enormous contribution that the present conference has made in spreading awareness and offering suggestions to resolve the imminent issues confronting mankind.

Ladies and Gentlemen, Thank You!



Vote of Thanks

Professor (Dr.) S.C. Raina
Professor, CLC

Hon'ble Justice Ranjan Gogoi, Hon'ble Justice Uday U. Lalit, Mr. Mohan Parasaran, Mr. Siddhart Luthra, other members on the dais, my colleagues off the Dais, delegates off the Dais, it's my pleasant duty, as vote of thanks is always said to be a pleasant duty. I am lucky to be much more pleasant today

because I will be communicating thanks to none else than my own family members.

Right from Justice Gogoi to that of Mr. Siddharth Luthra they are one amongst us. I was wondering as to how should I grace, Hon'ble Justice Lalit but thank God that he belongs to our extended family, so we are really grateful to you Sir. Justice Gogoi who always feels that it is home coming, my Lordship we are thankful to you. We are equally thankful to Justice Uday U. Lalit who of course has occupied the chair of elevated Bench in the Supreme Court, after many years of the constitutional implementation of certain things. People from Bar get elevated to Supreme Court directly that seems to be one of the exceptions. We thank you very much Sir.

I will thank last two together because Mr. Mohan Parasaran and Mr. Sidhartha Luthra have been the vertebral support to the Campus Law Centre, visibly and invisibly. If I call them "*triveni of the sangam*", the river which is not visible, they are the part of same *sangam*. I know the work they have done. I need not comment on that but whatever we are here today is because of the efforts of both of them. Mr. Luthra not only is our old boy, a teacher here and other things but has a symbiotic relationship with the Campus Law Centre since 2005 due to the International Moot Court we hold, we are thankful to both of you Sir.

I will be failing in my duty if I do not thank Prof. Usha Tandon, my colleague who has actually stepped into the shoes of certain traditions of Campus Law Centre and has well done



during last three years. The assessment of her success can be assessed by the fact that on a Sunday evening after 3 days of hectic activity to hold 200 people in this hall at a Valedictory Session is of course that, I should say 100 out of 100 marks to her. But I appreciate that this can be possible only when there is 'diet to mind' and 'diet to body'. I was participant to one 'diet to body' and that was wonderful. I was participant to the 'diet to mind' in first session, that was equally wonderful. So, I presume that the sessions have been really academically rich that's why participants are held up and of course the diet provided to them is equally wonderful that might have been another attraction. I was calculating the faculty heads silently. Almost 30 teachers are present here. You can understand a PIC having a command of holding 30 teachers in a Sunday seminar means that she is both academically correct and organisationally having the capacity to do so. Thank you very much Madam Usha Tandon.

Thanks to all the delegates who have come from all other areas of India and abroad because they have really made our conference as a success. I am thankful to those volunteers without whose participation this could not have been success particularly those who have tried to bloom flowers in the season when perhaps the season was not for blooming, I am talking about Mayank Mittal, and others who actually decorated the whole hall.

We have certain things common with where from Hon'ble Justice Uday U. Lalit is because if you see the college of Bombay, exactly near the railway station the building of that college and the building of ours is identical, the production is identical. The age of the Bombay Law College which has produced as many legal luminaries as this Campus campus, is the same. So, qualitatively we are together and of course infrastructurally equal.

So, thank you very much to all the dignitaries.



Welcome Dinner

The CLC, faculty, students and the delegates of the International Conference had a wonderful Welcome Dinner of the Conference. Everyone had a great time interacting among the CLC faculty, delegates and distinguished guests at the Magnolia Hall in the India Habitat Centre, New Delhi on the evening of 12th Feb 2016. The welcome dinner was hosted by Mr. Mohan Parasaran, Senior Advocate, Supreme Court of India and formerly Solicitor General of India. Besides the CLC faculty, student volunteers of the conference and delegates of the conference the dinner was attended by distinguished guests. Professor (Dr.) Koh Mun-Hyun, Soongsil University, Seoul, Republic of Korea; Prof (Dr.) Afzal Wani, Dean, Univeristy School of law and Legal Studies, GGSIP Univeristy, Delhi; Prof. (Dr.) C. Rajkumar, Vice-Chancellor, O.P. Jindal Global Law School, Haryana; Professor (Dr.) Rajiv Kahanna, Director, Faculty of Law, SGT Univeristy, Gutrgaon' Professor N.K. Rohatagi, former Professor, CLC were some of the distinguished guests during the dinner. The dinner started around 7:30 pm (Indian Standard Time) and concluded by around 9:00 pm. Everyone enjoyed the ambience and the food interacting with each other. The presence of the host- Mr. Mohan Parasaran, during the dinner, added elegance to the occasion and was greatly admired by all for the successful holding of the three day international conference.



Technical Sessions



Technical Session – I

Biodiversity and Ecosystem: Issues and Challenges

Friday, February 12, 2016 | 11:30 am – 1:00 pm | Venue: Seminar Hall, CLC

Chairperson: Professor (Dr.) S. C. Raina
Professor, CLC

Rapporteur: Ms. Harleen Kaur
Assistant Professor, CLC

The first Technical Session commenced with the welcome of the Chairperson, **Prof. (Dr.) S.C. Raina** by the Rapporteur, Ms. Harleen Kaur, Assistant professor, CLC. The Chairperson was then welcomed by Professor (Dr.) Usha Tondon, Professor-In-Charge, CLC, with a memento. This was followed by a keynote address by the chairperson. The chairperson stressed upon the importance of time and in order to save time, he instructed the speakers to avoid repetitions and only to highlight key issues and points. He then called upon the first speakers Richa Tyagi and Raghav Srivastava to present their paper.

The first paper entitled “*Protection of Wildlife Corridors- Variable Legal Tools for Species Conservation*” was presented by **Ms. Richa Tyagi & Mr. Raghav Srivastava, Programme Officers- Research and Partnerships, Centre for Environmental Law WWF-India, New Delhi**. Their paper essentially covered how the wildlife corridors of India are threatened and the importance of corridor management as a relevant tool for conservation. The First speaker, Raghav Srivastava defined wildlife corridors as linkages between regional biodiversity populations. They basically link source habitats. A source habitat is a habitat where the population of a species and the net birth rate is positive. He further elaborated that even though there are sufficient safeguards for national parks and sanctuaries in the statutory laws, the law speaks very less on preservation of wildlife corridors. This leaves wildlife corridors, which are source areas for maintaining a healthy gene flow particularly vulnerable to rapid infrastructural developments and industrialization. Furthermore, there are no strict prohibitions on infrastructural development in and around the corridors. The second speaker, Richa Tyagi elaborated on this issue with the help of a few examples of such diminishing and threatened corridors in India. For instance, the Kaziranga National Park in Assam faces widespread habitat fragmentation and ecological degradation owing to a national highway that cuts across the jungle. This has lead to deaths of animals and isolation of source habitats. Another issue threatening biodiversity highlighted was poaching, which is leading to fast extinction of various species.



Their paper stressed on the various barriers to corridor conservation and importance of effective corridor management as a relevant tool for conservation.

The second paper entitled *“Impact of Environmental Pollution and Ecosystem Health - A Review”* was presented by **Dr. Pranab Pal, Wildlife Institute of India, Chandrabani, Dehradun, Uttarakhand**. His paper discussed different kinds of pollution in detail, including its consequences. The presenter highlighted that the pressures and demands on natural resources are ever increasing and attributed the cause of such ecological degradation on increasing population of our country. He further discussed the misuse of natural resources by extensive mining, deforestation, mismanagement of human waste and garbage. The use of various chemicals in pesticides and chemicals such as lead and arsenic found in industrial wastes are a cause of heightened threat to humans and animals life alike. For instance, the toxic wastes in water bodies ultimately find its way to humans through food chain and consumption of water, which is sourced from these water bodies. This consequently results in ecological degradation and problems such as climate change. To illustrate the aforesaid mentioned point, he gave example of extinction of vultures due to the use of a common anti-inflammatory drug administered to livestock known as diclofenac. He concluded his presentation with suggesting a need of finding equilibrium between development and preserving ecological biodiversity. This he suggested could be achieved by legal reforms and awareness programs accompanied by change in attitude towards our surrounding environment.

The third and the last paper of the session entitled *“Biodiversity of Asian Elephants in Surguja Forest and Energy of Universe”* was presented by **Dr. Hiran Das Mahar, Assistant Professor, Department of Botany, Government RG PG autonomous college, Ambikapur Surguja, Chattisgarh**. Dr. Mahar authored the paper along with Divya Mahar, Shri Saibaba Model College Digma, Surguja University, Ambikapur, Chattisgarh and Durgesh Mahar, Department of Astrobiology, University Research Center, Ledari, SJKD, Korea, CG. The paper highlighted the dangers elephants are posing to humans in Surguja. Suggestions were put forward as to how the problem can be curbed. Furthermore, he also discussed the third law of time that deals with energy. In his presentation he highlighted the plight of inhabitants of Surguja and surrounding areas, due to wandering of elephants who wander for food, specifically American grass, which poses a threat to elephants, hence bringing to forefront the issue of man-animal conflict. To solve this problem he recommended that the *Parthenium* genus or more popularly known as, American grass should be eliminated. Furthermore, he suggested the use of tracking devices so that the tribal



population can be alarmed of approaching animals. He also suggested that enough fodder should be made available for the elephants, as once fed they will pose minimal or no threat at all. Furthermore, sterilization of elephants was also recommended as a mode of controlling the elephant population. He emphasized on the abundance of energy in the universe and if properly utilized there will be no dearth of energy and hence the biodiversity can be very well preserved.

The chairperson opened the session to the question hour. He requested everyone to be brief and to the point. He also invited observations if any.

Question and Answer Session

1. **Question (Mr. Aditya Narayan Prasad to Ms. Richa Tyagi & Mr. Raghav Srivastava)** As far as the Nagpur, the Tiger corridor in Kanha is concerned, there was a conflict between the Nagpur Bench and the Bombay High Court and the NGT. There were 35000 trees that had to be cut. Now the Supreme Court has said that the tigers are not important. So the Bombay High Court is going ahead with its plan and they are expanding, so the Tiger Corridor- You can forget about it. They have totally clarified that. So what is WWF's role in this? What is WWF's role as far as the corridor is concerned.

Answer (Mr. Raghav Srivastava): More generally, to tell you, a lot of these state boards of wildlife national parks, in the mandate of their constitution require a certain civil society members to be present. So on almost all of these boards it is us that are the members of these boards, WWF as an organization. So we give a lot of policy reports. So when these decisions are given a lot of times mitigation measures get added to the plan, for example, a lot of underpasses and overpasses are constructed so that the corridors are not disturbed to a certain extent. So, we can contribute to that extent. A lot of corridors have been secured owing to WWF's efforts. For example, in M.P. the state highway number 8 passing through the reserve has been closed off because of mortality of tigers on those roads, because of our intervention. So now the road is being constructed to go round the tiger reserve. We are able to make certain recommendations in these ways. To this Ms. Richa Tyagi added: that obviously you will not get to know about the good work that an organization does. If you do read the minutes of meetings of these boards, you will get to know that organizations like, WII, WWF are organizations that do put forward a very strong stand against these developmental activities. But obviously we have to take into consideration that development is important too. There are people who are dependent on these development activities. So we have to take that into consideration as well. So, the least we do is provide mitigation measures so we can save whatever we can.



2. **Question (Mr. Raghav Srivastava to Dr. Hiran Das Mahar)** Why do you suggest control of elephant population? Especially when they are already less in number.

Answer (Dr. Hiran Das Mahar): In Surguja area, the population of elephant is high and they are struggling with the human population. If there is less number of elephants it may be easy to control them. It is tough, if they are wandering in a group of 12 or more. Wherever they move they destroy the agricultural crop. I am from that location and I feel that if there is less number of elephants, people can be saved.

3. **Question (Mr. Raghav Srivastava to Dr. Hiran Das Mahar)** You were talking about elephant fodder, so how do we grow it and where do we grow it?

Answer (Mr. Raghav Srivastava): Fodder trees may be increased by tissue culture system, rooting system, vegetative development, because the fodder of elephants grow in a Particular manner. The fruit of these trees when eaten by birds, and goes through the elementary canal of the birds, only those seeds grow. This technique can be adopted for an increase in fodder trees. If the elephants are fully fed they will not attack and will not destroy the agricultural crop.

4. **Question & Observation by (Dr. Mrs. Erimma Gloria Orie on Dr. Pranab Pal's)**

My response or my reaction to the paper is that the presenter seems to have so much to discuss on impacts and causes and does not have a balance when it comes to challenges, recommendations and strategies. What would I have expected to see on the issue of strategy- the things you have on ground, in India that would make way for what we call diversity conservation. Things like environmental impact assessment, things like law of the land, things like law on forestry, probably a discussion on them as to give the reader an understanding that there are structures in your institutional frameworks. Because if you talk only of your laws and there is no establishment for their enforcement that's not the way the laws will work. The paper concentrates only on causes and impacts without discussing legal framework and institutional framework. Then the recommendations do not seem to match the challenges. My worry is without the mention of challenges how are we going to resolve them? Finally, on the issue of enforcement: With all that has been said about the causes and the impact. I was expecting the speaker to devolve on the enforcements as a way of resolving the issues. Whether the enforcement is weak, whether enforcement is strong and then move on to recommendation because I find this lacking.

Answer (Dr. Pranab Pal): Well, this is a very big matter, you can always recommend



but it all depends on teamwork. Government, NGOS, public - all should be involved. As I told already that land use patterns have been changing, national highways are increasing from two lines to six line causing forest degradation. Development is required but it should not be adverse to the environment. I can make suggestions but, for example, In Ganga river more than 1000 dead bodies of men and animals are released every day. We have to spread awareness and be motivated and encourage the people. Corridors are very big issues not only in Nagpur but in Haridwar and Rishikesh as well. So it is required that everybody should be involved. India's biodiversity is a very big biodiversity when compared to other countries. The tiger population has declined but we have made efforts and now it is increasing. We have to adopt process method, scientific method and all these are not one-day questions, rather it is teamwork and everybody should work systematically. Then we can save our biodiversity. Individuals alone cannot solve the issue. We can write everything but practically it is very difficult. The leopard population - since 1994 to 2015, more than 500 leopards were killed. The tiger population has come down from above 40000 to just a few numbers. We are responsible for all this. So what shall we do? We have to work systematically we have to work together with the other countries; it cannot be solved by only talking. Everything requires cooperation.

Observation by (Dr. Mrs. Erimma Gloria Orie on Dr Hiran Das Mahar's)

I have an issue with the topic. It does not seem to give any recommendation. It has discussed elephants but has not tied together to give a correlation and what should be done to protect both the elephants and the population.

5. Question (Prof. (Dr.) Usha Tandon to Dr. Pranab Pal)

Well, all the presentations were very good. Raghav and Richa have also made an excellent presentation on wildlife corridors. My specific question is to Dr. Pal. I congratulate you for having included in the beginning of your paper, population growth of the country as one of the causes for environmental degradation. In Law there may not be many studies in that regard, though I have written a book and certain articles on that. But of course in Demography this has been recognized and in some other areas this has been recognized. When we talk of the Law, in India, it recognizes industrialization as one of the main causes for environmental degradation and does not speak at all of population pressure. India is going to be the most populous country very soon, you all know. You highlighted the causes but I was wondering when you were coming to the challenges. In challenges you did not relate it. Causes and challenges are interrelated. If



we are talking about the conservation of biodiversity and sustainable development, then sustainable population also becomes one of the challenges. We just take a cognizance of the problem, relate it and then forget it. We don't take it further to the extent, as Prof. Raina was saying, that if we have identified the cause then somewhere or the we must come upon at least one suggestion based on these causes and the challenges. So do you feel that sustainable population could be one of the ways for taking care of the impact on the ecosystem. What are your views on that?

Answer (Dr. Pranab Pal): For example, construction of dams, before the devastation of Uttarakhand the government gave us the task to examine whether this dam is required for Uttarakhand or not? We submitted our report that dams cause damage to the ecosystem. Our paper was rejected. So, as I mentioned that in coal mining, for example, we have lost 26000 Hectare forest. Sustainable development is not easy and is a very big word. I think we should do all that we can do, so that, the next generation gets the benefit. The present generation must act for the benefit of the future generation. Everything is related. We are to be blamed for the population explosion. Furthermore, development will occur as per the need of the population; hence human beings are the main cause. Fragmentation, habitat loss because of the fragmentation, loss of forest in the Northeast due to fire etc. are increasing because of the pressure of the population. There is no place where animal can be safe.

6. **Question (Dr. Md. Mushiur Rahman to Dr Hiran Das Mahar)** You have mentioned that energy is infinite in the universe. But as far as my knowledge goes, energy like coal, oil, everything is limited. What I would like to know is what is the particular energy that is infinite?

Answer (Dr Hiran Das Mahar): There are many types of energy. Light, sound, heat, cosmic etc. the universe is already very vast and the earth moves 11.2 K.M. per second and for that how much energy must be required? It is just for one planet. In the solar system there are many planets and there are many solar systems, so, energy is infinite in the universe. On the other hand, the minimum energy is calorie, which we have. So there is a range from minimum to maximum. The universe has maximum energy and we have minimum energy. Energy is everywhere. If there is vacuum there too is cosmic energy. Energy is everywhere and some of energy is infinite.



Observations of the Chairperson

Professor (Dr.) S.C. Raina
Professor, CLC

The Chairperson thanked and congratulated the speakers on good comprehensive papers. In the context of the first paper presented, he observed that the paper did not touch upon economics and biodiversity and suggested that sustainability of biodiversity cannot take a utilitarian approach and must represent collective good at the cost of individual good. At this juncture he raised a question -can you go for such sustainability or should we look for a different approach?

With regard to the second paper, the chairperson complimented the speaker on presenting a comprehensive document on the kinds of pollution right from water to air. He further observed that in a session where least is said about the suggestion and more emphasis is given on problem areas, it is then upon you and I to decide as to what can be done. The Chairperson observed that Mr. Pal did not come out with the suggestions as to how it is happening and how can we curtail it. That is the main purpose of this seminar- to discuss how we can curb it. Mr. Pal has also not referred to NGT and the role of NGT in curbing pollution. In fact, assessment has not been referred to, which must have been the prime emphasis.

The Chairperson thanked Dr. Mahar and observed that coming from Chhattisgarh, gives him the knowledge of elephants wondering and eating the crops. He also observed that one of the important highlights of the paper, as Dr. Mahar suggested, was Parthenium Genus also known as the American Grass. The Chairperson observed that the American Grass particularly in the rainy season grows very high, almost 4 feet high. It causes irritation to the human beings but biodiversity wise it is equally good for the health of the elephants and that is why they eat it. It is not that it is dangerous for them. So by removing Parthenium Genus, he expressed his doubts as to whether we can stop the elephants from coming down. He further suggested that is not the reason they come. The reason, which Dr. Mahar has actually not suggested, that why do they come from forestland to our crop, is because their habitat is destroyed.

The Chairperson concluded the session with a short observation. Introducing himself as a teacher in criminal law and not environmental law the chairperson gave a beautiful analogy between criminal jurisprudence and principles governing biodiversity. He suggested that for a conflict between two human beings, the rights and the liabilities are decided on the basis of their contributions. They make to that act because both are capable of thinking. He further



said that he may have contributed two steps the other may have contributed one steps. So, his rights and liabilities will depend upon that. Biodiversity is according to him such a phenomenon, where rest of the organisms, such as, reptiles, amphibian, birds and insects are without any cognitive faculty. And human being are only genius because as homosapiens who have the reasoning powers to think - should he destroy or should he keep them. The liability clearly lies on him and not on them. So, biodiversity is completely in the hands of the human beings rather than on other organisms that are devoid of hands, metaphorically speaking. He further said that Dr. Pal was correct in saying that it is for us to understand whether we keep them or destroy them. And, if we are able to understand that, that their destruction means our destruction, then we should not destroy them and that is the basis of all biodiversity. He concluded by thanking everyone who was present.



Technical Session – II

Marine and Coastal Biodiversity: Issues and Challenges

Friday, February 12, 2016 | 2:00 pm – 3:30 pm | Venue: Seminar Hall, CLC

Chairperson: **Professor Rajiv Khanna**
Director, Faculty of Law, SGT University, Gurgaon

Rapporteur: **Mr. Aash Mohammad**
Assistant Professor, CLC

The second Session started on the first day of the Conference immediately after the lunch of the Inaugural session in the afternoon of February 12, 2016, with the introduction of the Chairperson **Professor Rajiv Khanna**, Director, Faculty of Law, SGT University, Gurgaon, by Assistant Professor Aash Mohammad, CLC. The Chairperson was then welcomed by Professor (Dr.) Usha Tondon, Professor-In-Charge, CLC, with a memento. The Session began with the keynote address of the Chairperson stating that conservation of Biodiversity in special reference to marine and coastal biodiversity in recent time is the most debated subject as marine and coastal biodiversity is the largest source of natural resources which provides to the maximum needs of human beings and which also supports life cycle of the largest biodiversity which exists on earth and it not only provides natural resources, supports life but it also regulates the temperature of the earth which helps in controlling the global warming. But due to population explosion and the overexploitation of marine and coastal resources and the unethical industrial, domestic and agricultural practices has led to the destruction of the natural habitat of biodiverse marine and coastal life which has caused a worldwide concern primarily because of extinction of certain species which has caused an imbalance in natural phenomena of productivity and consumption and the interdependency of biodiversity in oceans. He appealed to the audience to make the session an interactive and lively one, after which some time shall be provided for discussion. The Chairperson gave instructions to the delegates that each delegate shall not take more than 20 minutes and in order to save time, the delegates must focus on their main points rather than reading the paper. He also requested everyone to stick to the topic. He told to the House that he is reserving his remarks to be shared at the end of session, as he wanted to give sufficient time to the presenters and hear them first.

The first paper titled “*Marine Biological Diversity Beyond Areas of National Jurisdiction (BBNJ) - Exploring Issues and Nature of possible Future Agreement*” was presented by **Commander Kapil Narula, Indian Navy**. He highlighted the



need for protection of marine biological biodiversity, the existing governance framework and analyses the gaps and limitations in addressing the conservation and sustainable use of Marine Biodiversity Beyond Areas of National Jurisdiction (BBNJ) and need for further international cooperation and global support for ensuring protection of marine biological diversity beyond areas of national jurisdiction. The paper depicts that upto 13 percent of global fisheries have collapsed due to commercial overexploitation of the world's fish stocks. Coastal areas are also under threat and approximately 30 - 35 percent of critical marine habitats such as sea grass, mangroves and coral reefs are estimated to have been destroyed. Although Marine Protected Areas (MPAs) have been established to conserve the biodiversity of the oceans, yet, only approximately 1% of the world oceans are protected as compared to 12% of the land area. Unintended impacts of anthropogenic activities include pollution at sea from merchant vessels, floating garbage and plastic waste (e.g. Great Pacific Garbage Patch), impacts of bottom trawling and seabed drilling on deep sea corals and on the sea floor. Along with these direct impacts, there are indirect impacts as ocean de-oxygenation, eutrophication and acidification which are changing the chemical and biological composition of the oceans, thereby making it progressively unfit for aquatic life. It discussed various International legal provisions for conservation of marine-biodiversity specially for areas beyond national jurisdiction e.g. Under UNCLOS 1982, Article 194(1) assigns duty on the states, and lists the measures to prevent, reduce and control pollution of the marine environment explicitly stating that "States shall take, individually or jointly as appropriate, all measures consistent with this convention that are necessary to prevent, reduce and control pollution of the marine environment from any source, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavor to harmonize their policies in this connection". Such measures must also include those necessary to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life. It is the responsibility of the ISA to adopt the necessary measures to protect and conserve the natural resources of the Area, and to prevent damage to the flora and fauna. On the other hand, shipping activity in the High Seas is regulated by the International Maritime Organization (IMO). Under the current rules the authority to punish environmentally irresponsible conduct by ships on the High Seas falls on the flag state of each vessel. This has led to the practice of 'flag of



convenience' for merchant shipping and is one of the major weaknesses for protection of marine environment. The Convention on Biological Diversity, 1992 (CBD) which is a comprehensive legally binding multilateral treaty covers all ecosystems, species, and genetic resources and is a key document for protection of biodiversity, sustainable development and fair and equitable sharing of the benefits of resources. However, the CBD does not specifically address the uniqueness of issues related to conservation of marine biodiversity and does not contain any specific article on marine and coastal biodiversity. Further there are many non-binding instruments which provide policy guidance for addressing marine biodiversity in ABNJ. These include, the Rio Declaration and Agenda 21 adopted at the 1992 United Nations Conference on Environment and Development; the Johannesburg Plan of Implementation (World Summit on Sustainable Development, 2002) and; 'The Future We Want' (outcome document of the United Nations Conference on Sustainable Development, 2012). The Decision VIII/21 on 'Marine and coastal biological diversity: conservation and sustainable use of deep seabed genetic resources beyond the limits of national jurisdiction' was also adopted. However, over the course of time, it was recognized that the existing framework of regulations and agreements did not sufficiently address the conservation and sustainable use of marine BBNJ. This was both due to 'legal gaps' as well as 'implementation gaps'. A 'legal gap' describes the absence of a rule or inadequate legal mechanisms to regulate an issue at a global, regional or sub-regional level. Hence, an issue remains inadequately addressed, either in a substantive or geographical sense or both. Realizing the importance of marine biodiversity and inadequacies in governance of the ABNJ, an Ad Hoc Open ended informal Working group was established by the UN General Assembly in 2004 to identify the gaps in the international legal regime and to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction. In the fourth working group meeting held in 2011, the group agreed to a "package" of issues which could be addressed in an 'implementing agreement' under the UNCLOS. Marine genetic resource, including the sharing of benefits, Area-based management tools, including marine protected areas, Environmental Impact Assessments (EIA), Building capacity to enable sustainable and equitable development, The transfer of marine technology. Marine genetic resources (MGR) which is a potential source for drugs and medicinal use is one of the main issues of contention between the developing and the developed countries.



The existing UNCLOS regime is silent on the MGR and only refers to the mineral resources in the Area. Marine scientific research (MSR) in ABNJ does not require any permission from the coastal state and is a part of the freedom of the high seas. Bio-prospecting is therefore open to all States in the ABNJ as it is the common heritage of mankind, except for the general obligations to protect the marine environment which is specifically mentioned in the UNCLOS. At the end the paper presented the recent recommendations of the Ad Hoc Working Group on the BBNJ adopted by the UN General Assembly in September 2015. The Preparatory Committee (Prep Com) will make substantive recommendations and will submit a report to identify the elements of a draft text of an international legally binding instrument under UNCLOS to the General Assembly before the end of the 72nd session, to be held in September 2017.

The second presenter **Ranidipa Ghosh** presented her paper entitled *“The need of Legal and Judicial Measures for Preservation of the Endangered Aquatic Species Inhabiting in the Rivers of Indian Sub-Continent”* which started with mentioning the need of legal and judicial measures for preservation of the endangered aquatic species specifically Dolphins in the rivers of Indian sub-continent (Ganga). It discussed some recent attempts of government have given some hope to this life supporting source to many aquatic species (dolphins) like National Mission for Cleaning of Ganga River (Namami Gange), National Ganga River Basin Authority and budget of Rs.300 crore by the central govt. In 2015 along with declaring more ecological sensitivity zones within 10 km of DOLPHIN sanctuaries and prohibition of any kind of activity to take place within this prohibited zone whether it is industrial, commercial or domestic traditional practices and also strictly implementing the sec. 3, clause(3) of Environment Protection Act(NGRBA) and also ENVIRONMENTAL IMPACT ASSESMENT method before establishing any industry or commercial entity which is pollutive in nature and which might endanger the aquatic species (DOLPHIN) which are completely dependent on GANGA river for their bio diverse life.

The third paper titled *“Preservation of Marine and Coastal Biodiversity in the 21st Century through Sustainable Development”* was presented by **Sahil Ghei and Nidhi Nagpal**, Students, Campus Law, Centre, University of Delhi which focused on depleting health of Marine life and Oceans, disturbed pH levels, High



use of chemical fertilizers, Domestic Sewage, Eutrophication, Industrial Effluents, overexploitation of Fisheries, etc. It discussed that the evolution of life on earth primarily had existed in oceans only and the variety of life which now exists is the result of this billions of year evolution which is known as biodiversity but now this so called variation among species which forms a very important fabric of life in the form of food chain is being threatened and is depleting because of the anthropogenic activities which is the result of overexploitation and the unethical and degrading activities like Deep Sea Mining, Nuclear Pollution, Chemical Industries untreated waste disposal into water streams, Growth of Algae, Eutrophication and Over Fishing. It suggested that International laws and legally binding treaties are required to be framed for the protection of biodiversity which exists in seas and other water sources which accounts more than 2/3 of the total biodiversity which exists on earth e.g. UNCLOS 1982 and all the nations should be made parties to these International agreements and they must feel and realize and bind themselves to be legally compelled to abide these international obligation by enacting and amending their national and municipal laws in such a way that protects the coastal and marine biodiversity and there should be the same kind of legal sanctions, penalties and punishment for violating these rules with equal force as are being imposed when other national or local laws are violated like; criminal and civil law like Art 51(A) of the Indian constitution empowers Judiciary to protect environment and its implications and at the end the paper suggested the need to develop MPAs to check species extinction in South Asia, improvement of Base Line information, scientific data on marine biodiversity.

At the end of the Session, during the question hour, few important questions were asked by some other delegates. The question and answer are as follows:

Question and Answer Session:

Question 1)-Dr. Erimma Gloria Orie : What should be the way out to protect the biodiversity of areas beyond national jurisdiction on high seas?

Answer- (Kapil Narula): Presently there are not any such International legally binding agreement that can prohibit a particular nation to explore or utilize bio diverse natural resources on high seas, it is just the conscience of each nation which has to be protective and preserving in nature that the biodiversity of oceans or its natural bounty is not overexploited to that extent that the damage to biodiversity is irreparable in nature. Aim of this paper presentation is to spread awareness about the importance and the evil



consequences that might occur if biodiversity is not protected rest people can make their own conclusions.

Question 2)- (Dr. Md. Moshir Rahman) : What are the Suggestions to step up rights of India and Bangladesh to extract marine resources?

Answer (Kapil Narula): Developing Countries like India and Bangladesh argue marine resources should be available for all the nations on an equal footing there should be fair distribution of those resources with the help of capacity-building measures like transfer of technologies by the developed world to the developing nations so that they can also have a fair share in the natural bounty of marine resources and developed countries should make a biodiversity pool which should be distributed on the basis of equity principle.

Question 3:- (Student, CLC): Which authority controls the Deep Sea mining excavation?

Answer (Sahil Ghei): Any issue regarding the overexploitation deep sea and it's an a mining is controlled by ISA, which is governed by stringent laws. India is one of the countries who have been a party to the International agreement to protect the biodiversity from excessive deep sea mining.

Observations of the Chairperson

Professor Rajiv Khanna

Director, Faculty of Law, S.G.T. University, Gurgaon

The Chairperson, Professor Rajiv Khanna observed that in recent times there has been a significant change in the climate and environment and as a consequence structural imbalance in the very fabric of biodiversity has occurred because of the population explosion and its increasing demand on the limited sources of nature and as well as the practices and method adopted by us to explore the natural resources to fulfill those requirement which has affected the global biodiversity to a great extent because of the loss of natural habitat of bio diverse life and the cumulative effect of this process has led to extinction of various species which plays a very important role for a balanced natural phenomena. He cautioned that it is very urgent to stop this over-exploitation of biodiversity if we want our future generation to enjoy the same kind of quality and quantity of natural resources which is also the very premise on which the principle of sustainable development is based. Conservation of biodiversity is not only a scientific problem but it also involves public policy and their effective implementation at National as well as International platform. There is need to



enforce International treaties and conventions for the protection of biodiversity at the national level with the same legal sanctity as local municipal laws are enforced. He also emphasized the need for eradication of poverty as poverty leads to degradation of environment. Along with eradicating poverty we also need to reduce the inequalities which exists between developing and developed nations when it comes to distribution of natural resources. We need to devise capacity-building measures among them so that natural resources are explored and utilized in environment friendly manner through transfer of eco-friendly technologies by developed nations to developing nations He gave example of the Clean Development Mechanism and like mechanism to be adopted for conservation of biodiversity. He cited International initiatives like GATT, TRIPS and other regional and International conferences which have been conducted but still the problem of loss of biodiversity has not been addressed properly. He put forward the question that whether we should follow the same pattern which other nations have followed which has destroyed the natural habitat and led to species extinction due to that loss or we need to develop our conscience to be more responsible and conscious towards protecting this very fabric of life supporting phenomena called biodiversity.



Technical Session – III

Gender and Biodiversity

Saturday, February 13, 2016 | 09:30 am – 11:00 am | Venue: Seminar Hall, CLC

Chairperson: **Professor (Dr.) Indu Agnihotri**
Director & Professor
Centre for Women's Development Studies

Rapporteur: **Dr. Poonam Verma**
Assistant Professor, CLC

The session on the second day on the conference started with introduction of the chairperson **Prof.(Dr.) Indu Agnihotri** President, CWDS by the rapporteur, Dr. Poonam Verma, Assistant Professor CLC. This was followed by the presentation of a memento to the chairperson by Mr. Maotoshi Ao, Assistant Professor, CLC.

The session formally began with address by chairperson where she mentions that the topic of the conference was extremely not just relevant but critically significant not just for lawyers to understand but for our country and all our citizens to understand what are the issues involved. She further instructed that the time allotted for each paper was of about 15 min and in order to save time the presenters should mention only the highlights of their paper and skip any point which has been discussed previously by some other presenter in this session.

The first paper entitled "*The Right to Grow, to Nurture and to Conserve Feminist Dimension on the Biodiversity Challenges in India*" was presented by **Ms. Niharika Bahl, Independent Law Researcher and Guest Faculty, Campus Law Centre, University of Delhi**. She broadly discussed the role of women as food providers, cultivator, nurturers and keepers of traditional knowledge. She highlighted the relationship between women and biodiversity and the fact that despite accounting for 60-80% of all food production in the developing countries, women's contribution in management and conservation of biodiversity remains largely ignored. She further emphasized on the shrink in biodiversity due to a shift from subsistence to commercialisation of agriculture and demands of capitalist growth, and its impact on the lives of women, which urgently calls for bringing to the fore the role of women in sustaining the biodiversity. She briefly discussed the international as well as domestic legal framework like – Nagoya Protocol, Biodiversity Act, 2002 Forest Rights Act, 2006 etc. and where these laws are lacking in giving women the due rights and



recognition, she lastly suggested some steps to be taken and changes to be made to make women's voices count.

The second paper entitled "*Conservation of Biodiversity and Indigenous people*" was presented by **Ms. Madhu Bhatti**, Assistant Professor, Law Centre – II, Faculty of Law, University of Delhi. The focus of study in her paper was the rights of indigenous people in the context of xaxa committee report. She defined who indigenous people in context of India were, how they were recognised in groups but with passing time individuality becoming prominent in the identity, they are now alienated and majorly deprived of their rights and resources. She mentioned about basis of distinction or classification of these tribes that guided the colonial British Indian Government and is also reflected in the V and VI article of the constitution. She critically analysed the situation in the light of recommendations made by the xaxa committee report and the amendments suggested by them. Also discussed the developmental measures with help of three approaches namely – Isolationism, Assimilation and third and the best approach Integration, suggested by the National Tribal Policy. She further emphasized on the legal framework present internationally and domestically like International Labour Organisation, Convention 169, 1989 and Panchayat (Extension to Scheduled Area) Act, 1996 and the lack in implementation in their provisions.

The last paper titled "*Achieving Redistributive Energy Justice – A Critical Analysis of Energy policies in India*" presented by **Ms. Mansi Verma LAMP Fellow, PRS Legislative Research, New Delhi**. She discussed about the concept of redistributive energy justice in context of India which would mean that everyone despite their standing in society enjoys access to secure energy. She quoted data from several government reports which reflect the situation of energy injustice in India i.e. energy poverty in rural India where a huge number of households do not have access to modern energy resources, high poverty near Economic Zones etc and mentioned the dire effects of energy deprivation. She focused on attaining energy justice through "energy trilemma" and its three goals – Energy security, Cost effective energy and sustainable use of energy. She analysed inter-connections in energy and economic development which calls for a rise in need for energy with the growth of economy and how can these ever increasing energy demands be satisfied using renewable and alternate energy resources. Highlighting the current public policy scenario in India like-UDAY, The Draft Renewable Energy Act, 2015 etc and recommendations of these policies, she also suggested the measures which can be taken to achieve distributive energy justice,



Question & Answer Session

1. Question ((Mr. Neeraj Gupta to Ms. Mansi Verma) How can we collect fund and provide infrastructure for energy justice? Do we have any fiscal measures to tackle this problem?

Answer (Ms. Mansi Verma): First of all nowhere in my presentation did i say that energy justice is only about cooking food, even if it was, I think food is definitely the most important thing as far as education is concerned definitely having electricity at home greatly increases the chances of studying, especially in villages to be capable to focus on education so that aspect hasn't been missed. There has been research which is in the context of India which says that if the very basic level of electricity is made available then the schooling years on an average have gone up in those households, so there is definitely a linkage there. As far as the fiscal measures are concerned I dint mention about such schemes. The point here is not that where we get the funds from, funds can raised. We have international development assistance available, it's about how those funds are to be utilised and where those funds are to be utilised that is the bigger question . so for instance, one of the schemes that the government has recently launched is UDAY where basically the state is going to take over the huge liabilities of the power distribution companies which runs in lakhs and crores and some of the states like Chhattisgarh, Jharkhand etc where transmission loses are created , those are some of the states on which the burden is going to be much bigger as compared this how much are we investing on renewable energy that's the question that we need to look into the point to be seen is that we are just thinking that the way to achieve universal access of energy is that we need more coal based power plants , we need to lay down more distribution and transmission lines and we need to connect every household with that, that hasn't worked in the past and that might not work in the future. The Draft Renewable Energy laws which were supposed to be passed categorically laid down that those parts on India where laying down bridge is not possible we should look for alternate solutions, we should look for distributive locally available renewable resources which can be used to generate electricity only for that area, that will also empower the community because they will be involved in the process principles of procreation and principles of community ownership coming into picture but then how much are we investing in that? The distributive generation as compared to 33,000 crores that we are investing in expanding our grids.



Observations of the Chairperson

Professor (Dr.) Indu Agnihotri

Director & Professor

Centre for Women's Development Studies

She said that she got at least a chance to look through Niharika's paper and for others she did not have a chance to look through except while they were being presented. She commented that it is very interesting the ways the subject has been approached, although gender was not necessarily there directly in all the presentations but she acknowledged that there is scope to incorporate those concerns. She addressed that the three presenters are aware that this needs to be done, but she said that she feels it has not been sufficiently addressed.

She further added that what the papers are trying to do which is interesting and important, especially in the light of this conference is that there is an attempt to draw linkages as well as comparisons or explore the possibilities both in terms of the international law, convention etc. and the national laws. What she found slightly missing and she put it since she haven't read the papers with a depth she can't say that it's not there at all but there is an issue that when we discuss all this there is always need to explore what are the fault lines in this and when she says fault lines she meant the issues of inequity and inequality which exist and come up both in terms of international exchanges vis-a-vis our own concerns, our own history, our own context and also within the nation. Within the country, there are issues of unequal access, differential impact of these policies, and differential ability to access the rights that are being talked about she said that some of those concerns are there when you are talking about say, forest rights etc and even Madhu's paper she observed that there is a need to integrate that slightly more. She said that Niharika makes an attempt to bring in the colonial situation but she commented that it is not sufficient to look at it in terms of colonialism and British policy but in terms of a chronology. She further observed think what we need to understand is that it should be under lying our discussion in a sense is, how there is an intrinsic logic in capitalist development particularly which wreaks havoc with the natural resources its relationship with environment has always been an uneasy relationship to say the least. She meant to say that it is uneasy is a very benign comment in fact it is a very confrontationist relationship and what we are seeing in terms of tribals and their loss of land, resource, forests in displacements etc and then the issue that you raised of migration, so these are all interlinked processes and what is equally important for us to understand is that even though the government of India swears by Constitution, the challenge for all of, who are



working in the area of law, is to see how the laws and conventions that are being drawn up at the international level, whereas these are acting as statements of good intention but actually do they inform our policy ? and if they inform our policy, is that policy actually being implemented? are those commitments to the citizens being honoured ? or how unequally they are being honoured? and where there is scope for legal intervention or the law to be invoked to ensure that citizens' rights are not trampled upon, especially in the cases of the marginalised communities, whatever name you call them. She commented that we must be very sensitive to the fact that this notion and this concept of indigenous people has actually been imposed on us and this is not the only time, a lot of international laws and conventions impose a vocabulary on us that vocabulary, for instance, the whole notion of indigenous people in context of the American continent has a specific meaning but does it have the same meaning in terms of India? its an issue.

Secondly she, acknowledging Madhu Bhatti, said that there is a politics to that vocabulary as, that India's position is that we are all indigenous which also has its own politics because in India in fact it is like *"har aadmi is mein laga hai ke mera khoon sabse asli hai, matlab main hi asli hindustani hu"* so in this conflict this international vocabulary is increasing unlike in the 70s there was a larger and a more intense debate about that vocabulary, today what is coming from the UN is being accepted whole sole lock stock and barrel. She made the session know that she started hearing this whole thing about indigenous around the time of Beijing 1995 where they actually held a series of sessions around indigenous women she observed that In India of course indigenous is a big debate *"kaun pehle se hai kaun nahi hai kaun kahan se aya hai kaun kahan gaya hai isika to sara khel chal raha hai politics mein"* and cautioned that let us be sensitive to that reality there is also another aspect to it, the whole anthropological ethnographic approach to tribes is often steeped and draws upon a whole stock of colonial anthropological records, perceptions etc. those also have to be taken with some critical importance and the struggle there is that on one hand we know that colonialism went along with and evangelical agenda to spread Christianity but she placed that something else has been on for the last 20 years definitely in very categorical terms, there is an attempt to *"hinduise"* the tribes. So we should be sensitive to both these subjects of international convention as well as the underlying conflicts debates in within the national context so that needs to be looked at a little bit more. One more point she made in general that somewhere underlying all the three presentations are issues which have been very much in the centre of development of women' studies in India and elsewhere and it may help to draw upon that a bit more familiar way that the fact that in the 70s the whole issue of women studies and focus on gender came up as part of what we call the



“development debate “ and a whole critique of what was seen as mainstream policies, which were very intrusive, exclusive, discriminatory and unequalising towards people in general but towards women in particular and the whole debate on development in which third world countries participated with more critical contributions and forced the first world countries to think and look critically at their own agendas because the whole pattern in which the UN system works today is that there is a fountain head of knowledge which is located in the north as we say or in the first world and then some laws are brought in, some international conventions and then there are some training programs where it was always first world trainers coming to third world people with no information, no knowledge of our systems our histories etc. So there was a huge debate, right through the 1980s the women’ movement and academics like Prof. Veena Majumdar, Prof. Lotika Sarkar, African academics and activists who were also engaging in policy debates intervened at the international level to push critical perspectives and i think we have a lot to learn from reading more about those debates because for instance this phrase of “mainstreaming gender”, what does it mean? does it mean “jisko hum apni bhasha mein simplistically kehte hain - chai ka cup hai usmein cheeni daal ke mila dejiye, cup to wahi hai, chai to wahi hai” so do we want to be mixed up in the existing system? or are talking about alternative policies? and is there a need for more critical alternatives to be sought out? so its a huge debate which was reflected in the UN platforms, you can say in the whole think of what we use as acronyms like women in development, and all. So there is a need to draw upon some of those. She asked Niharika not to take this maria mies vandana shiva framework uncritically. the women’ movement has critiqued this whole nature, culture and its equation with gender role, because it stereotypes gender roles it also essentialises women and it not only essentialises women it also asserts a homogeneity about the category of women which is highly problematic. she cautioned that we always need to be careful about how we invoke tradition very often its done very selectively but ancient Indian history gives us very rich examples of what we call separateness without being totally isolated because the tribal communities have always had the repositories in terms of very specific expertise particularly with regard to the metals, natural resources, forest, wealth etc. and you can see that from ancient times, some of the interesting thoughts ideas in 6th century B.C. come not from so called mainstream development we tried to translate that word to 6th century B.C when the state was coming up, the peasant societies coming up, in fact if you go into Buddhism, Jainism the origins of all are critical ideas in 6th century B.C. come from the margins they do not come from the heartland of the advancing peasant society. So there is a lot to figure out from there and there has always been a healthy exchange despite maintaining a separateness and there is a lot written about that so you could look at that.



On the issue of forest rights committees and BMCs etc, she asked to remember the 70s where there was intense debate, they did not want women. the women really pushed themselves in and the women' movement pushed them but them women from the forests actually just pushed themselves in saying what the hell are you saying, when you are setting up these communities and you are excluding us. the CWDS has had a 35 year long programme which started with Bankora district in West Bengal but it is three districts of west Bengal still where we are working with the forest dwellers and in essence and rich experience of joint forest management initially then forest protection committees etc. So we should have a look at what Prof. Veena Majumdar, Narayan Banarjee etc have written, that could be interesting .

On Madhu's paper she made some comments about indigenous people but she again said what we need to look at is the links with the policy framework because in our case we specialise in having some very good committees, for instance the Sacchar Committee came up with very interesting findings but where are we with any of its recommendations now khaka committee will also come up with some. She for instance pointed about interstate migrant workmen' act, in which she and her centre were involved and studied internal migration in 22 states of India. She made said that ts all circular migration, if you go by Supreme Court definitions its almost bondage condition they are out of their homes if you go to Jharkhand, Chattisgarh, Orissa where the tribals are residing, 6 to 8 months the tribals are away from their homes in construction industries. The conditions as far as payments, wages, by any definition of the supreme court it would bring on the bondage or semi- bondage conditions but even after the intervention of the forest rights act how much is being done to actually translate those. Even if you interact with the tribal women living in Delhi in our own homes as maids, they will tell you "jana hai woh kagaz nahi aya hai" so she pointed out that it would be very interesting if students of law go on to see how these laws are actually playing out on the ground it would be worth exploring that and asked to linkup all these things with the development policies.

On Mansi's she said that again it draws on the international context, she had a lot to learn in terms of the concepts were being used and they need to be more simplified for use and understanding by others. She said what we really need to understand and that's where thought gender was missing but the fact is that the women's movement in India has been very concretely saying that all that you are talking about which actually up there in terms of international debates on climate change , carbon footprints and all those things but actually these things are having a direct impact on women's lives if you go to any of the villages



where the tribals reside you find their life is more difficult because of the sort of taking away of their resources, so their habitat continues to be in those regions but the resources are gone that is why they are out in search of work for 6 to 8 months because the natural resources through which they earn their livelihood and managed their lives are gone. You might be interested to see how one of the things we are grappling with is the rate of migration for women has gone up some 20% higher than it has for men now what is the reason for it? is it that their access to natural resources common property resources where women's role was is being lost? what is determining this shift, there is no other explanation for it but on the other hand what the paper really needs to bring in component from india in terms of what is actually happening on the ground. In chattisgarh Korba district is where all your BALCO, NTPC are there it is known as the power hub and in the villages there the tribal person holds that "ye chirag tale andhera hai" because you are sitting literally in the village where the biggest power hub of India but there no electricity in the homes of the villagers. She said that it really sums up the story, but what we need to look at is actually because environment and these issues of biodiversity have affected women directly because of that perhaps women have been in forefront of all environmental struggles in India all whether its Chattisgarh, Narmada, Arunachal where you have a plan for 40 hydro electricity plants. She further observed that we need to look at some of those issues more carefully and for more Indian references, many of the references related to the international debate but there is a lot in Indian history and sociological work as well as more recent work from the women's movement which draws on these linkages between international treaties and agreements, the national fallout of these or the non - implementation and the actual impact on lives. Lastly she thanked all very much and asked everybody to explore those linkages and keep inequality and the need for democratic processes to be incorporated into all development debates and development processes at the centre and generously said that all have a lot to offer in terms of how the law can be used to take issues on.



Technical Session – IV

Biodiversity, Development, and Eradication of Poverty

Saturday, February 13, 2016 | 11:15 am – 01:00 pm | Venue: Seminar Hall, CLC

Chairperson: **Professor (Dr.) Surender Kumar**
Professor, Delhi School of Economics

Rapporteur: **Mr. Mayank Mittal**
Assistant Professor, CLC

The session started with a brief introduction of the chairperson **Professor (Dr.) Surender Kumar, Professor, Delhi School of Economics** by Rapporteur **Mr. Mayank Mittal, Assistant Professor CLC**. Mr. Mittal then invited Dr. Poonam Verma to present the memento to the Chairperson and also handed over the charge of the conference to him. The proceedings formally began with the keynote address by the chairperson who emphasized on making the session an interactive and lively one. He then stated the time limit to be followed by the delegates which was 15 mins. He requested that in order to save time, the delegates must focus on the main points rather than reading the paper. He also requested everyone to stick to the topic.

The first paper titled *“Causes of Biodiversity Depletion in Bangladesh and its Impacts on Ecosystem Services: Study on Sundarban”* presented by **Dr. Md. Moshir Rahman, Deputy Director, Bangladesh Public Administration Training Centre (BPATC) Savar, Dhaka, Bangladesh**. The objective of the paper was to estimate the present scenario of biodiversity in Bangladesh, causes of its depletion and its effect on the ecosystem. As the name suggests the paper also focused on analysing the role that Sundarban plays in preserving the biodiversity in Bangladesh and the reasons for its depletion. Dr. Rahman discussed about the diverse species of flora and fauna, the forest is a host to, and how due to human intervention like pollution, use of fertilizers, sinking of coal and oil tankers, hunting etc the forest and its inhabitants especially the infamous tigers of Sundarban are endangered. As a result of these continuous interventions a large number species of animals have become extinct in the area. He also highlighted various data surveys done to know the impact of the proposed Rampal Power Station Project, on the biodiversity. He concluded by making recommendations to mitigate the present situation and save the Sundarban forest.

The second paper titled *“Challenges and Legal Regime to mitigate Climate Change in Reference to Biodiversity, Development and Hunger”* presented by **Ms. Mukta Verma Assistant Professor, Faculty of Law, University of Allahabad, Uttar Pradesh**. Her paper



created a nexus between biodiversity, hunger and poverty and focused upon how conservation of biodiversity plays a vital role in ensuring food security, as well as in other medicinal purposes like, pharmaceuticals, herbs and traditional knowledge etc. The presenter discussed the effects of climate change on agriculture which leads to hunger and poverty and the role that advancements like food biotechnology, genetic engineering, etc. play in food production and further on the rights of farmers, indigenous people and intellectual property rights at national and international levels. She also gave an insight of the legal regime present in this regard, nationally and internationally i.e. Biological Diversity Act, Wildlife Protection Act, TRIPS, UPOV etc and suggested how government, people and industries can participate to reduce climate change effect to protect biodiversity.

The last paper entitled “*Biodiversity of North East India and the Impact of Indigenous Mode of Cultivation on its Flora and Fauna with Special Reference to Mizoram*” was presented by **Ms. Ikshita Singh, Student, Campus Law Centre, University of Delhi**. The paper attempted to highlight the impact of shifting cultivation on the biodiversity of North East region, as this form of agriculture is one of the major drivers of deforestation. Ms. Singh discussed that how shifting agriculture results in loss of soil nutrients and invasion by weeds etc. and how as a result of this, the forest cover in this region is rapidly decreasing. The paper highlighted that how practices like shifting agriculture also known as *jhumming*, can be appropriately regulated to save the biodiversity of the surrounding area. For example- the state of Tripura has banned this practice and other states such as Nagaland, Mizoram have given it legal recognition and effectively regulate it, Nagaland empowerment of people through economic development (NEPED) and Mizoram Forest Act, 1955. She emphasized that because practice of *jhumming* is an integral part of the culture and tradition of the North East India, it cannot be banned or curbed as a solution but it should be regulated and used in a more productive way for the conservation of biodiversity.

Question and Answer Session

1. **Question (Dr. Erimma Gloria Orie to Ms. Mukta Verma)** How can public policy be created so as to balance the relationship between fulfilling every citizen's right to healthy, organic, and nutritious food, and meeting the quantities of food supply required via high-productivity GMOs, which may interfere with biodiversity?

Answer (Ms. Mukta Verma): We should create a balance by encouraging organic farming and simultaneous research and development of cereals to boost production. While GMOs may not be ideal in their current state, continued research is important



because in order to guarantee the right to food, huge quantities of grains and cereals will be required.

2. **Question (Mr. Mizum Noyodu to Ms. Ikshita Singh)** Why jhuming was targeted when it is a traditional source of livelihood shared by the community, while mindless destruction of forests for timber, which does not allow for regrowth, is a concurrent threat to biodiversity? Are there any alternative methods of cultivation other than simply banning the practice of jhuming.

Answer (Ms. Ikshita Singh) Instead of banning jhuming, the Centre and the States of the North-East should look at examples of Arunachal Pradesh and Meghalaya where community efforts have been directed toward finding a middle-path of regulation of jhuming, without a ban.

3. **Question (Dr. Vandana Mahalwar to Dr. Rehman)** What are some of the challenges and solutions to the depletion of biodiversity in Bangladesh?

Answer (Dr. Rehman): Any industrial project site should be located at least 50 km away from a rich and vulnerable ecosystem such as the Sundarbans. Governments should not give assent to industrial projects purely to make monetary profits without considering the ecological impact on the surrounding area. Young researchers and students should spread awareness about the ecological situations around them which require preservation and protection.

Observation of the Chairperson

Professor (Dr.) Surender Kumar
Professor, Delhi School of Economics

At the outset the chairperson thanked the organisers for inviting him to chair this interesting and policy relevant session on “Biodiversity, Development, and Eradication of Poverty”. He said that this session had three papers, out of which two are case studies and one discusses the food and resource conservation scenario in the country and the common thread in all these papers are the three key words: development, ecosystem services and public policy and law.

He observed that the continuous loss of biodiversity and persistence of poverty in the last decades have attracted the attention of both policy makers and researchers for protecting, restoring and enhancing ecosystem services and eradicating poverty. Conventionally, poverty has been defined in terms of calories intake or per day per capita minimum



expenditure. These expenditures just take into account only the goods and services that are marketed. But, note that the human well-being is linked to both, marketed and non-marketed goods and services and the development measured using the figures of marketed goods and services cannot be true indicator of human well-being.

He further said that sustainable development is commonly defined following the definition given in “Our Common Future”, that “... *development that meets the needs of the present without compromising the ability of future generations to meet their own needs.*” Here, the question is how to make this definition of sustainable development operational. The development can be sustainable if we are able to transfer the per capita capital stock that we got from our predecessor to our coming generations. Here we are taking about the capital stock, it does not mean just about the man-made capital such as buildings, infrastructure, machinery etc, it also includes human capital, built capital, social capital and natural capital. Human capital includes the knowledge and information stored in the human brains, their physical health and labour force. Knowledge and information is linked to the availability of educational and advancement facilities available to the human beings whereas the physical health get strengthened through the medical facilities. Built capital is the capital that is conventional defined stock of man-made capital and the natural capital includes all those natural resources which are not produced by human agencies, i.e., the natural world, the ecosystems. Social network and norms that facilitates cooperative actions constitute social capital and it includes cultures and institutions. All these four types of capital are necessary for maintaining and supporting sustainable human well-being.

He made a point that it has also been observed that in the last two decades, there is considerable research in the areas of biodiversity conservation and poverty eradication, but it have limited impact on the decisions of policy makers. The reasons for the limited impacts are generally searched in an ineffective interface between the policy makers and research community. In the concerned literature, it has been observed that salience, creditability and legitimacy of the knowledge generated though the research are the enabling conditions for linking research and policy. Legitimacy in the knowledge is linked with the unbiasedness of the knowledge and fair consideration of stakeholders’ different point of view. He concluded the observation by asking the research community to understand the processes and challenges in decision making and said that increased interactions, frequent exchange of information and clarifying conflicting stakeholders’ values will help in reducing the research-policy gap.



Technical Session – V

International /Regional Legal and Institutional Framework

Saturday, February 13, 2016 | 2:00 pm – 3:30 pm | Venue: Seminar Hall, CLC

Chairperson: Professor (Dr.) C. Raj Kumar
Vice Chancellor, O.P. Jindal Global University, Haryana

Rapporteur: Mr. Akash Anand
Assistant Professor, CLC

This Session started with a brief introduction about the chairperson by the Rapporteur Mr. Akash Anand and the Chairman **Prof. C. Raj Kumar** was felicitated by the Conference Director Prof. (Dr.) Usha Tandon herself with memento. The first speaker **Dr. Niraj Kumar, Assistant Professor, National Law University, Delhi** with his paper “*An Enquiry into Possibility of Global Environmental Organisation with Special Reference to IUCN and UNEP*” deliberated that IUCN was established in 1948 with the help of 18 governments, 124 national agencies and non-governmental organisations and a collective of individual scientists and lawyers. Part I of IUCN Statutes declares that International Union for Conservation of Nature is constituted in accordance with Art. 60 of the Swiss Civil Code as an international association of governmental and non-governmental members. Over the period IUCN has become one of the world’s largest global Environment organisation, with almost 1,300 government and NGO Members and more than 15,000 volunteer experts in 185 countries. Since then it has been working tirelessly to help the nations of the world address emerging threats to the environment with the objective to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable. The statute of IUCN states that every state member shall have three votes; every Governmental agency that is not part of state member shall one vote. Every National non-governmental agency shall have one vote and every International non-governmental agency shall have two votes each. Therefore it can be assumed that IUCN is *sui generis* so far as its representative character is involved. IUCN has entered into strategic partnership with Global Environment Facility, UNEP, UNESCO, WWF and World Bank to achieve its goals. IUCN has been instrumental in developing the CBD’s “Programme of Work on Protected Area”. IUCN has been also providing secretarial assistance to many high contracting parties e.g. in case of Ramsar Convention. IUCN also serves as a principal scientific advisor to the Conference of the Parties in application of article 23, paragraph 5 under CBD. So there are enough evidences to suggest that IUCN interacts with many of the existing environmental instrumentalities to



achieve collective goals. There has been a general trend in Post world war I and II towards creation of Global organisations, for example WTO, WIPO, ILO to name a few. Some of them proved to be very potent like WTO and others like ILO were not so effective. So if one is inclined to generalize on the basis of success or failure of existing organisation may find evidences inconclusive on either side. But an enquiry in the light of cost-benefit analysis is demand of the day. The author holds the view that current international environmental structure is having many fault-lines. The author also believes that creation of a Global Environmental Organisation must not be a monolith with great centralizing tendencies. The major arguments in favour of Global Environmental Organisation are *inter alia*; it will lead to coherent emphasis on environment issues both internally i.e. between various environmental organisations like IUCN, UNEP etc. And externally vis-a-vis other issue based international organisations like WIPO, WTO, WHO and may be also with international agencies like IAEA. Lack of coordination has resulted into a scenario where, after collapse of Kyoto Protocol, there doesn't exist even a single binding climate change treaty. It is also being submitted that achieving of the above goals will not be very problematic because of the fact that most of other organisations and agencies have their in-house environmental branches. It has been accepted by almost all players that there can't be even benign neglect of the environment. One of the important structural issues which have been explored is the role of Non-governmental organisations in this kind of Organisation. Generally, International organisations allow representation by State players only. Even if one fundamentally disagree with membership of Non-governmental organisations in recommended international organisations but one can argue for some status like observer status for them, given the role played by them in environmental issues historically. The barriers to achieving these goals are also many folds. There is a general sense of unease among proponents of free trade in accepting environment as a trade barrier. The author submitted that these concerns are not well founded and interaction between a centralised environmental organisation and other issue-specific international organisations will result into fewer conflicts.

The second speaker, **Dr. Vandana Mahalwar, Assistant Professor, Indian Law Institute, New Delhi**, with her paper "*Biopiracy, TRIPS and CBD: A Call for Harmonisation*" affirmed that Biodiversity, being the verity and variety of life on earth comprising million of species of plant, animals and microorganisms, each having a value of its own, seems to be more relevant in the landscape of changing pattern of globalisation and emerging environmental problems. United Nations adopted the Convention on Biological Diversity (CBD) in 1992 and formulated three key objectives concerning the Genetic



Resources: conservation of Biodiversity; sustainable use of its components; fair and equitable sharing of benefits arising from use of genetic resources. India, passed the Biological Diversity Act, 2002 to be in line with the provisions of CBD. The Biological Diversity Act, 2002 addresses the key issues which dominated the CBD landscape i.e. access to biological resources and sharing of benefits arising out of such access. Conservation of biodiversity in wake of biopiracy unfolds multifaceted issues regarding the commercial potential involved in these biological resources and the associated knowledge. But, the predicaments get exacerbated when the some ultimate products based on these genetic resources are protected by the Intellectual Property rights and commercialized. Though conservation of biodiversity is not a part of The Agreement on Trade-Related Aspect of Intellectual Property (TRIPS), but biological resources constitute valuable property which get translated into major economic and technology gains and the country of origin of the concerned genetic resources remain deprived of its legitimate share of the profits generated out of them, it. Such free-ride or unfair advantage of the biological resources and traditional knowledge is referred to as 'Bio-piracy'. Section 6(1) of BDA provides that any kind of Intellectual Property Right for any invention based on any biological resource obtained from India is required to obtain prior permission of The National Biological Authority. Likewise Section 10(4)(d), Patents Act, 1970 requires a disclosure of source and the geographical origin of the biological material in the patent application. But, Article 29 of TRIPS does not establish any obligation on the patent applicant for the disclosure of geographical origin of the bio-material and knowledge. Moreover, TRIPS does not require to provide evidence on 'Prior Informed Consent' from the holders of Bio-resources. Also, TRIPS is silent as to ensure fair and equitable sharing of benefits between the patent owner and the resource owner. Certainly, the inclusion of disclosure requirement in national law would leave the global biopiracy problem unanswered unless the said inclusion is advanced at international level too. Hence, to further the aims of CBD, there is a need for incorporation of some compulsory provisions under TRIPS Agreement which all member states would be mandated to comply with and the amendment to TRIPS should incorporate three disclosure requirements: (a) disclosure of source and country of origin of biological material; (b) disclosure of evidence of prior informed consent; (c) disclosure of an evidence of a benefit sharing agreement. She in her conclusion discussed the tensions between TRIPS and CBD, the proposed amendments and responses to such proposal by the developed and developing countries.

The third speaker, **Dr. Shabnam, Assistant Professor, LC-II, Faculty of Law, University of Delhi, Delhi** with her paper *"Project Tiger in India – A Prodigy of Convention*



is *International Trade in Endangered Species of Wild Fauna and Flora (CITES)*” but before her paper presentation said that she had a lot to learn despite being a teacher and recognized Dr. Usha Tandon as her mentor though not guide but a guide in several ways that she guided us towards important issues in environmental matters. She described her as a leader where as far as environment issues are concerned and we as faculty following her everywhere, wherever she starts with environmental issues or conferences or seminars and thanked her for making her a part of the conference.

She affirmed the importance of project ‘tiger’ which was named in India earlier. But when incidents of poaching and extinction in Sariska and various wildlife sanctuaries came into the forefront not by the Indian Authorities but by authorities in the U.S. and the world broad looking. It broad into matters focus on the animal which is referred to as the Panther or wild Asian cats and it was the danger of the extinction of animal which brought into effect the qualities or the law of land which was changed to bring in authority for the protection and preservation. The prime way to bring protectionist into force I would like to say that it’s just not the National issue; it’s a Trans-National issue. Started with adoption of several measures inter nationally first then it went nationally. Leaders have elaborated on the issues of I.U.C.N. and this was one of the basis for starting of the convention on endangered species i.e., C.I.T.E.S. and under this convention it brought about various changes. Looking into the history of Wild Asian Cat. We see that it had a natural habitat which spread from Caspian Sea to the island of Java. Starting from previous century to the current century which can be trace from 1940. After that when the number started to become nil they have been reducing even though the census goes on to talk of number that at times like in India, when the number were counted there were 2000 Tigers but with the efforts of the Govt. as well as the wildlife officers the number had increased to 4000 in 1989. Near extinction of the endangered animal ‘Tiger’ paved the way for action plans for saving the species by specifically having specific provisions added to The Wildlife Protection Act, 1972 under the Indian Law. It was initiated by the Central government in 1973 for their protection in their natural habitats by combating their illegal hunting with the help of a Tier Conservation Authority set up for their special protection. This Authority in 2012 notified specific guidelines for its conservation and Tourism as well as ‘ecotourism’, a term for synchronization of natural environment and wildlife with the local people of these areas. Destruction of the corridors of natural habitats and the species living getting endangered brought out the C.I.T.E.S, an agreement amongst Nations, under the aegis of the World Conservation Union. She concluded by saying that convention provides for a framework,



making it legally binding on member states to percolate the same through the domestic laws of their country, coming into force in 1975.

The fourth speaker, **Dr. Kavitha Chalakkal, Assistant Professor, Amity Law School, GGSIU, Delhi** with her paper “*Role of Convention on Migratory Species of Wild Animals in Conservation of Biodiversity in India*”, affirmed that The convention on the Conservation on Migratory Species of Wild Animals (CMS) 1979 is the only global treaty capable of linking disparate regional initiatives for the protection of migratory species. As migratory species cross international boundaries, inter-jurisdictional management issues are highly complex. A common framework treaty such as the CMS provides a good platform for concerted international legal effort to address the issue. The tools that CMS has used to attain its objectives such as legally binding agreements, memoranda of understanding, and action plans have resulted in better international conservation strategies, over the years. However, the true success of the Convention depends on the proper implementation of these instruments at the domestic level. CMS has placed significant implementation and reporting duties on the States, which while differing from each other in technical and financial resources and political stability and will, have to work together under respective instruments. Worldwide, the problem of disappearing species is mainly being tackled from the perspectives of biology and ecology, with comparatively lesser attention to the socio-cultural, economic and institutional factors that bring the species under threat. Conservation mechanisms for migratory species should ensure equity by structuring the overall conservation schemes in such a way that related factors like the right of the societies concerned and the extend of restrictions on the sovereignty of Member States are addressed. This gains relevance in the Indian context, especially, while considering the conservation issues regarding certain threatened migratory species such as the Tibetan antelope (which is killed in China to extract wool processed, woven and traded exclusively in India), Bengal tigers, Asian elephants, the Amur falcons (which is hunted in thousands in tribal areas within the Indian Territory, during its travel from East Asia to Africa), etc. India, with its tremendous biological diversity and political clout, has the capacity to lead other States, especially in Asia, towards an effective regional conservation regime compatible to CMS system. However, though the nation is party to CMS and to certain particular species-protection instruments under it, India is yet to recognize the need to have a special focus on migratory species protection, especially in cases whether the species are either not covered under its Wildlife Protection Act, 1972 or when covered, might not be listed in the Schedule-I of the Act. Moreover, it is yet to wake up to problems like geographical shifts (habitat changes altering migratory ranges) that could happen under the influence of global Climate Change.



The presenter looked into the qualitative changes that have taken place in the intergovernmental normative approach-soft to hard instrumentalities-in the conservation of wild animals, especially, migratory species and its domestic implementation in India and also threw light on the current general legal framework for the protection wild animals in the country, and how it deals with the conservation of migratory species and would also suggest ways in which India could adopt a comprehensive conservation plan for migratory species.

The last speakers were **Trinadh Kumar Potina & Shruti Gulia, Students, CLC, University of Delhi, Delhi** and with their paper "*The Impact of Bioprospecting and Biopiracy on the Food Security and Economy of the Indian Agricultural Diaspora*" asserted that Bioprospecting is the search for commercially valuable biochemical and genetic resources in plants, animals and microorganisms and Biopiracy is the commercial development of naturally occurring biological material such as plant substances or genetic cell lines by a technologically and/or economically advanced country or organisation without fair compensation to the indigenous population within whose territory such materials were originally discovered. These two terms are the product of intellectual ingenuity of the advocates of free trade and intellectual property rights and they have the prospect of destabilizing a technologically or economically disadvantaged country's social, economic and biodiversity fabric by exploiting its indigenous knowledge base. A simple example is the case of a bioprospector drawing on indigenous knowledge of medicinal plants like Neem and Turmeric which is later patented by pharma companies without recognizing and acknowledging the fact that the knowledge is not new and one invented by the patentee and thereby depriving the indigenous community of the rights to commercially exploit the techniques which they themselves had developed and mastered over thousands of years. The Convention of Biological Diversity (CBD) endeavours to secure the rights to control access to genetic resources for the countries in which those resources are located and its objective is to enable lesser developed countries to better benefit from their traditional knowledge and genetic resources and it requires the bioprospectors to obtain informed consent to access the prior art existing in the biodiversity-rich country. The Nagoya Protocol is a supplementary agreement to the CBD and provided a transparent legal framework for the effective implementation of one of the three objectives of the CBD; the fair and equitable sharing of benefits arising out of the utilization of genetic resources. On the other hand the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) is adopted by the WTO to have Intellectual Property protection that will contribute to technical innovation and the transfer of technology while enhancing social welfare. These two conventions appear to be in conflict with each other with the indigenous people favouring protection



under CBD and the industry seeking protection under the TRIPS umbrella. In India Bioprospecting and Biopiracy has already had its impact in the agricultural sector in the form of attempts of hijacking traditional knowledge and genetic resources like Basmati Rice, Neem, Turmeric etc. One the Generically Modified Organisms (GMO) front India has also had bitter experiences through BT Cotton and BT Brinjal. At their conclusion they deliberated on the detailed aspect of the impact of Bioprospecting and Biopiracy on the agrichemical, agribusiness and food security sectors as well as on the Biodiversity of India and the legal versus the policy conflicts and loopholes between the CBD and TRIPS and other relevant international conventions that results in a failure to protect the traditional and indigenous knowledge in the agricultural sector.

Question and Answer Session

1. **Question (Mr. Neeraj Kumar Gupta to Dr. Niraj Kumar)** What kind of composition you look forward? Is it inclusion of States or NGOs?

Answer (Dr. Niraj Kumar): I look at Art. 22 mechanisms for effectiveness so some kind of bargain has to struck between the legal standing and the possibility of effectiveness of the order. And, the representation across this spectrum so I will say that primarily the States should be the members, the NGOs and other institutions of the international standings can be given observer status. There are many ifs & buts in that so we can discuss that subsequently.

2. **Question (Dr. Ashish Kumar to Dr. Niraj)** What are the Stumbling blocks which might exist in the realization of establishment of global environmental organisations?

Answer (Dr. Niraj Kumar): I understand that there are stumbling blocks and the greatest coming from the trade institutions because over a period of time what has happened the environment is one of the thing funny thing which happened was that UN charter was not talking about environment. It was talking about many other thing. UN could not establish such a situation. Subsequently environment because very important all the trade institutions and the bodies like GATT, WTO that we are going to have interface with the environment. So there developed some kind of in-house working mechanism to take care of environment issues. And I am very much sure that what they all as now trade barriers and possibility of creation of all these barriers so these are issues which require some kind of managing not just enquiry.

3. **Question (Mr. Ajeet Singh to Dr. Vandana Mahalwar)** In reference to Nagoya Protocol, what is supplementary agreement to original agreement?



Answer (Dr. Vandana Mahalwar): The reason why you not find mention on the Nagoya Protocol in my presentation is that the concern was on only for patents is one thing. And second thing is that you must be knowing it as you have been teaching it for a long time that all developed countries, they have not ratified CBD so far but they are party to TRIPS because they are member-state to WTO. So my concern was on only for developed state so that we should do something which meant to comply with. So this is the reason. And one more thing, that why we fell for this Nagoya for equitable arrangement is not discussed because the primary focus was on disclosure of region.

4. **Question (Dr. Pranab Pal to Dr. Shabnam)** Kaziranga Tiger Reserve poacher killed our staff, within 5 days come out of jail, how you would strengthen environment local laws? Second You said Tiger population is declining, but I would like to share we recently while issuing a report, tiger population has increased from 2013 to 2016.

Answer (Dr. Shabnam): The question as far as the census is concerned, it is finalised by the authorities which says what the Indian number has been given is not accurate because of the probably the monitoring system which is the pug marks system census system and camera traps system and they are not being to catch accurately the number which they are given out, they have given approximately 1700 number of wild nations in India. As far as incidents narrated are concerned, we are not only concerned, we accept certain factors that exists in our country which is corruption, the another is poverty, people's dependence on that. One of the suggestions, which I would like to say for creating awareness is providing alternative occupation to the village or communities who are living around lowering that dependency on the animal of the illegal trade helping them into engaging them into livelihood which are other than agriculture or forest areas. What if or whether a person is literate or illiterate. A person definitely knows that killing of an animal is wrong. We had had our ancient culture. We had our modern laws. I think killing cannot suffice or get killing or eliminating or extinction cannot be a justification only for as it would be a quick monetary gain for a very few people. What we are losing out on that is something much more as highlighted by our Union Minister yesterday, that if we lose out of one of the species, it means we are also losing our certain species of plants and interdependence of these animals which are dependent on them. So to know that as an excuse we must have a bureau which is a crime control bureau.



5. **Question (Dr. Pranab Pal to Dr. Kavita)** Tiger reserve percentage has increased now. How people can get awareness to fringe village areas, this is the main reason, so how they can develop environment laws?

Answer (Dr. Kavita): I think we have to really see how many of them are really illegal poachers are very close to the near fringe areas or are they outsiders so just making the fringe villages aware will not solve the issue. Then I would say because claiming of particular tribe or particular village as responsible people for that is not the exact thing.

Observations of the Chairperson

Professor (Dr.) C. Raj Kumar

Vice Chancellor, O.P. Jindal Global University, Haryana

The Hon'ble Chairperson at the outset said that it is not possible for him to provide a comprehensive summary of the rich presentations. He said that this whole idea of wanting to create a legal institutional mechanism deals with the big issues of our time, the natural temptation to create large organisations which can have overall regime but barring the WTO many other organisations have not been in very positive. The evolution of international law and remaining issues has not been treated important. And most specialised organisations has certain regional frameworks which might be a better approach. Having said that, for all the regions that were articulated by a number of panellists led by Neeraj makes a case of that mechanism and even the some of the interventions talks about the institutional architectures and the design that needs to be evolved for this organisations to be effected and of course we had some really thoughtful presentation looking at project both tiger and migratory bird on the other and migration of species in general in these cases one thing is clear the rhetoric and aspiration of the regimes that created and probably the lack of effectiveness in implementing the institutional mechanism of legal measures that were both domestic and international. He observed that is the continuance of work in progress and probably can hope if we are moving towards international architecture then to what extent that can help in the enforcement. He further noted that although, we know in the context of human rights and other areas is far more effective for domestic and national level. One other thing that he did hear and observed is the panel which is very worthy of talking is that the role of civil society, politicians, environmental activists, surrounding many of these issues clearly both in India and group of developing world is of most of environment activism has not come from the state activism. Describing it he said that it actually came from the non-state activism even then the courts have played an important role. It was largely because of public litigation as well as civil



society organisations, environmental, NGOs, reaching these issues. May be that also takes us to the point back to what extent standing for these organisations have international. He said that it was a very good presentation by the panels including some of the students of law faculty on issues surrounding TRIPS & biodiversity, food security and its impact. He emphasized on the question that why there is very strong need for keeping in mind issues surrounding traditional knowledge as well as to what extent the developing countries need to become a part of the conversation. He also argued that this is clearly large scale social, political and institutional failure on the part of the developing country for not being playing an active role in this internal regime and it is fair to say we are living in the world today when developing countries are and we are having a duty and responsibility for ascertaining their institutional identity and the need to play a far better role that we are playing historically. He said that he does not think the country like India can abdicate its responsibility towards playing an active role is both negotiating as well as leaving space for third-world wise, which will represent many other countries. He further deliberated that we have far too long completely lost our card and also abdicated our responsibility towards playing an important role in large international system and have begun and we are in that process. But he made a remark that it is important for countries like India to play therefore better role on that there is also a need for developing institutional capacity in relation to these aspects for even the context of IP and the right of emphasis on legal education within the context of legal education there is a lot can be done some of the issues are discussed here today in this panel also has huge impact on the nature and the context of how we need to promote trade and capacity to build in because many of these issues are relatively dynamic grossly evolved issues and concluded by saying that what has been decided so far as loopholes and as well as the need to strengthen policy level engagement will get inevitably revised in the years to come.



Technical Session – VI

Energy Law and Sustainable Development

Saturday, February 13, 2016 | 3:45 pm – 5:15 pm | Venue: Seminar Hall, CLC

Chairperson: Professor (Dr.) Usha Tandon
Professor-in-Charge, CLC

Rapporteur: Ms. Cheshta Dahiya
Assistant Professor, CLC

The sixth working session of the Conference started on the second day in the evening of Feb. 13, 2016 with the introduction of the Chairperson, **Professor (Dr.) Usha Tandon**, Professor-in-charge, CLC, by the Rapporteur, Ms. Cheshta Dahiya, Assistant Professor, CLC. The Chairperson clarified at the outset that she is not occupying the Chair of this Session because she has expertise in it, but because Energy Law is attracting her attention after climate change and biodiversity, and she wants to learn it to understand its legal issues in somewhat better manner. On the lighter note, she said that this may be enjoying the privileged position of the Director of the Conference. She expressed her firm belief that this Session would be enlightening enhancing her own knowledge along with the members of this august house. Further she complimented that she is very pleased with the level of discussions happening in all Technical Session held so far.

The first presenter **Chandralekha v., Assistant Professor, SDM Law College Mangalore Karnataka**, while presenting her paper entitled “*International Energy Law and WTO issues and challenges*” highlighted that the energy trade at the international level is mainly regulated by the domestic law. There is no international energy law as such to regulate energy trade. She emphasized that WTO rules are applicable to trade in energy goods and services. But there is no separate agreement under institutional framework of WTO. So the increasing energy needs and privatization of state owned entities, the relationship of energy trade and environmental pollution, debate on sustainable development are strongly compelling the WTO to adopt some policy framework towards the regulation of trade energy. She further discussed Agreement on technical barriers to trade and energy trade. This Agreement deals with rules relating to technical regulation and product standards. Members are free to adopt only those technical regulations which should not create “unnecessary obstacles to international trade” and must not be more trade-restriction than necessary to fulfil a legitimate objective. The legitimate objective includes, national security, requirement, prevention of deceptive practices, and the protection of



human health and safety of animal or plant life or health or the environment These Technical Regulation are relevant to energy trade. For example a number of WTO members have technical regulations relating to energy efficiency for products like automobiles and appliances. Now it is common to use energy efficiency labels to the product and provide information on the products energy performance. These labels are affixed to the product and provide information on the products energy consumption of electrical appliances and to show the level of carbon dioxide emitted by the vehicle, etc. The International Organization for Standardization (ISO) has developed standards on solar energy, hydrogen and wind technology, solid and liquid bio-fuels, as well as concerning the calculation of thermal properties of buildings or construction materials

Then she Concluded by saying that there is no international energy law as such to regulate energy trade. The WTO rules are applicable to trade in energy good and services. But there is no separate Agreement under the institutional frame work of WTO. The GATT/GATS are not defining the energy trade and trade in energy is not expressly included in its purview. There are many Conventions and Treaties at the international level to protect environment and prevent climate change, through energy issues. From the point of international trade law, all these agreement regulates the international energy market, and the WTO has also indirectly regulates the energy trade. As the population increases ,the demand for energy also increase, which results in increasing of energy trade. It affects environment as well as the biodiversity. Like energy trade even environmental protection also not considered through separate instrument by the WTO. Each and every Multilateral Instruments of WTO makes provision for environmental protection and conservation of natural resources. As we know energy transactions cause highest environmental pollution. For the purpose of protecting biodiversity the WTO trade agreements can accept separate instrument so that along with the regulation of trade, the environment pollution can be minimized.

Ms. Nikita Patta Joshi, Research Scholar, the West Bengal National University of Juridical Sciences (NUJS) Kolkata, West Bengal, the presenter of the session, presented a paper entitled *“IP in the Way of a Clean and Green Environment: is Licensing the Solution”* She discussed that on one hand it is believed that strong IP rights and protection urges continued growth of a clean technology industry. But on the other hand such strong rights would impede developing countries access to the most efficient available technologies. She emphasized that IP rights to promote clean technology innovations and enabling global access to these technologies can be seen analogues to the tussle between strong IP rights to protect inventions and fights for access to life saving drugs in developing countries. While it



is true that stronger patent encourages technology transfer in the form of imports, FDI and licensing to developed countries, stronger patents have little effect on technology transfer of ESTs and climate change related technologies to low income countries. Experience across jurisdictions show that it cannot even be said that strong patent positively impacts innovation. Also, various legal uncertainties have continued to undermine possibilities of meaningful balancing action from sides of developed and developing countries. Further, ESTs and climate change related technologies encompass a wide variety of technologies, each focusing on a different aspect of environment and climate change. Thus there is need to focus on building more and more frameworks for mutually beneficial economic arrangements between developed and developing countries to encourage innovation and transfer of technology to address climate change. The consideration of various measures related to IP should consider all opportunities within climate negotiations and not be limited to TRIPS Agreement. Any suggestion should also be made in light of difficulties and vast political cost of modifying existing regime under TRIPS. Lastly, at the end of the day we must not lose sight of the fact that IP rights are only one of the various factors affecting flow of technology across jurisdictions. At the international level too, technology transfer has become increasingly drawn into political negotiations between developed and developing countries, particularly those relating to environment related issues. Thus other factors like enabling environment, financing mechanism, adequate incentives etc, need equal attention, in the absence of which no amount of flexibilities in the IP regime would help achieved desired levels of technology diffusion and dissemination. Thus it is the need of the hour that more and more practical initiatives that would enable diffusion of green technologies into developing countries should be focused upon and issues like changing the IP regime should be addressed subsequently.

Thus, any suggestion considering the need for developing flexibilities in the IP regime to facilitate flow of clean energy technologies can be scrapped off. The question whether the existing IP regime and the flexibilities provided by the legal framework is adequate for healthy development and dissemination of green technologies to developing countries evokes mixed response. Therefore, there is no single policy solution or balancing mechanism to solve the issue of sustainable access to ESTs by developing countries. In view of the discussion above, she concluded that the call for developing countries to resort to compulsory licensing mechanism is a laudable step, but may not be a very feasible one as it poses an unattainable standard. we need to look at the debate from a multidisciplinary perspective that would look at not just flexibilities in the law but also developmental and social politics as well as environmental politics.



The third paper entitled “*The Urgent need for an Urgenda in India*” was presented by **Mr. Shreeyash Uday Lalit, Student, Campus Law Centre University of Delhi**. He focused on the recent landmark decision of the *Urgenda Foundation case* of the Netherlands, Hague District Court. He highlighted that the District Court has compelled the Government of Netherlands to fulfill its obligation, by nature of its duty of due care, to achieve its objective of 25% reduction in Green House Gas emissions as under the UN Framework Convention on Climate Change. He discussed the decision of the Court in light of civil and constitutional law and compared the same to Indian situation. He divided his discussion on this into three major points. Firstly, in drawing a parallel between the *Urgenda case* and the Indian legal scenario, the first point of inquiry would be to determine if a tort action on similar grounds can be upheld in the Indian legal system. Prior to the promulgation of statutes, tortious actions based on nuisance or negligence were more of customary law. Moreover, the requirement of standing or *locus standi* in environmental matters has been considerably relaxed. India offers a highly relaxed and widened application of the principle of locus standi which is a complete departure from the “proof of injury approach”. This catalyzed the formation of a new kind of litigation, known as Public Interest Litigation (PIL) which is extremely effective in dealing with environmental disputes in so far as they are concerned with the rights of the community and not the individual. It may entail the appointment of an *amicus curiae* and follow a non-adversarial approach. Therefore, there would be no issue in importing the decision of the *Urgenda case* in so far as the standing is concerned. Secondly, in India, the doctrine of separation of powers has no strict position in the Indian Constitution. However, it has been as a part of the constitutional law developed by various jurists over time. Subsequently, in a catena of decisions pronounced by the Indian Supreme Court on the subject, the doctrine of separation of powers is not deeply entrenched and embossed in the constitutional framework. *In re Delhi Laws Act* case, the then Hon’ble Chief Justice Kania observed that “*although in the Constitution of India, there is no express separation of powers, it is clear that a Legislature is created by the Constitution and detailed provisions are made for making that Legislature pass laws. Is it then too much to say that under the Constitution the duty to make laws, the duty to exercise its own wisdom, judgement and patriotism in making law is primarily case on the Legislature?*” What followed were a number of judgements which categorically upheld the separation of powers as being a salient feature of the Indian Constitution. Thirdly, the Precautionary Principle is well established in the Indian legal system, which is the same principle incorporated into the understanding of the climate change mitigation in the *Urgenda case*. The Indian Supreme Court in the case of *Vellore Citizens’ Welfare Forum v. Union of India*, held that the precautionary principle is a



prominent principle of environmental jurisprudence in India. Furthermore, in *A.P. Pollution Control Board v. M.V. Nayudu* the Supreme Court discussed the historical development of the principle. In the case of *Narmada Bachao Andolan v. Union of India* the Supreme Court observed that where a lack of data or material may disturb the ecological balance, then the benefit of doubt must go in favour of the path that is less likely to result in pollution.

The last presenter **Ms Sana Nassem, student Faculty of Law, Aligarh Muslim University, Aligarh, Uttar Pradesh** while presenting her paper entitled “*Energy Law, Climate Change and Sustainable Development : A comparative Analysis*” submitted that the relationship between Economic Development and climate change is of particular importance to developing countries because they are in the development process and also because of the particular climate challenges that many face. She highlighted the significance and importance of energy security, and measures for improving and management of conservation of biodiversity laws and sustainable energy, vis-a-vis the present climate change and for promotion of global sustainable development. There is a need for collective responsibility for effective implementation of the mitigated climate policy in quest for the energy security. A major obstacle to implementing improved access to energy is that states and communities do not have the financial means or the technology to do so. In calling for energy access for all, the World Commission for the Ethics of Science and Technology (COMEST) has emphasised the responsibility of industrialized countries to cooperate with developing countries in an endeavour to reach energy equity. And, in Cancun it was decided that the developed countries would raise a Green Fund worth \$100 billion annually by 2020 to assist developing countries in meeting their challenges of climate change. As of May 2015, the amount raised was a paltry \$10.2 billion. Though, policy should be coordinated at a cross-national level since energy is a global commodity. There are various strategies to enhance energy security, the most obvious being the diversification of energy sources and resilience against shocks and disruptions. A cross-border is also crucial so that entire energy chains can be protected effectively. International organizations play a central role in the emergence of international energy law. They represent a response to the globalisation of the regulatory challenges. Strategies for SD at international, national and local levels as well as in private and nongovernmental spheres can help overcome barriers and create opportunities for RE deployment by integrating RE and SD policies and practices. Poverty alleviation and economic development require more widespread provision of energy resources and services, which will adversely impact on human and environmental security unless energy needs are met in a sustainable way through the use of more efficient and sustainable distribution, generation and consumption technologies. The increasing use of fossil fuels poses a danger



to human security for a number of reasons. And if, the oil dependency is not reduced, there will

be significant competition for remaining oil resources which is likely to create further conflicts and considerable oil-price volatility. As reported by the World Bank, 2010, in India, major crop yields are projected to decline between 4.5 and 9 percent over the next 30 years as a result of climate change. As the Third IPCC Assessment Report warns, “the impacts of climate change will fall disproportionately upon developing countries and the poor persons within all countries, and thereby exacerbate inequalities in health status, access to food, clean water, and other resources.”

At the end of session, during question hour a few important questions were asked by other delegates and certain observation were also made.

The question and answer are as follows:

Question and Answer Session

Q.1. Question (Professor B.B. Pandey, Indian Law Institute, New Delhi, to Chandralekha)

As your presentation is on energy law and when we have different type of laws, so how can you say there is no international energy law, what type of energy law you have taken into consideration?

Answer: (Chandralekha V.): I have mentioned in my presentation that WTO rules are applicable to trade in energy good and services, But there is no separate Agreement under the institutional frame work of WTO as such to regulate energy trade it is mainly regulated by domestic law so separate regime should be there.

Q.2 (Dr.Erimma Gloria Orie Nigeria, to Chandralekha)

In the Intended Nationally Determined Contributions (INDC) submitted just before Cop21 this year, it is no surprise that India’s thrust throughout negotiations at Paris this year has been on differentiation, so that developing countries can have necessary emissions space to grow. So what impact it has brought and how far energy justice for its people has been given? And what is WTO contribution to this?

Answer: (Chanderlekha V.): WTO has created a lot of confusion by ignoring the energy trade. Debate on sustainable development etc strongly compelling the WTO to adopt some policy framework towards the regulation of trade in energy. My paper focused mainly on WTO and not on INDC



Q 3. (Mr. Ajeet, Assistant Professor Campus Law Centre to Shreeyash Lalit)

Why are you not looking into Indian aspects, as way back in 1987 Justice Bhagwati in *Bandhumukti Morcha* case has observed few of the principles that it is the duty of state to see the needs of present and future generations which was referred by the presenter through a foreign judgement. Even in the National Green Tribunal 2010 , one of the provision says that when there is environmental issue it has to be solved keeping in mind sustainable development.

Answer: (Shreeyash Lalit)

My paper deals with the consequences of the neglect of the duty of the State to take care of environment in the specific context of GHG. There is national commitment to an International Covenant. If that is not fulfilled by the State, what action can be taken by the citizens against the State. Generally writs are filed. But this Hague judgment gives jurisdiction to the lower courts.

Observations of Chairperson

Professor (Dr.) Usha Tandon

Professor-In-Charge, Campus Law Centre, DU

The Chairperson, Professor (Dr.) Usha Tandon complimented and applauded all the presenters- Chandralekh, Nikita, Shreeyash and Sana- for their excellent presentations.

While congratulating Chandralekha on her wonderful presentation, which was quite exhaustive and very systematically presented, she commented on one of the suggestions given by the Chandralekha that separate international institutions for trade energy should be there. The Chairperson expressed the concern that multiplicity of institutions can also be one of the problems. She narrated one story of a Professor who had two daughters- in- law , both of whom were very faithful to him, but there was no coordination between both of them. The Professor had to attend some Conference. He bought a new trouser, which was two inches extra long for him. He told his daughters to mend it. One daughter- in- law took the trouser, cut it short by two inches and kept it back in the room of Professor. Thereafter the other daughter- in- law also did the same and consequence was that when Professor wore it on the day of the Conference, it was short in length by two inches. So, too many institutions may not serve the desired purpose. However, as far as this area is concerned, one thing is there, that it has not got the requisite attention from the international law architects.

The Chairperson commended Nikita for her clarity of thoughts in bringing out the point



in her presentation that the conflict in Intellectual Property Rights to promote innovations in clean technology of industrialized countries and the enabling global access to these technologies by the developing countries can be resolved by analogy of IP rights to protect pharmaceutical inventions and fight for access to life saving drugs. The Chairperson also highlighted that transfer of technology is important for the developing countries including Asian & African countries, but particularly for India, as India is not only developing country but also most populous, so we need to develop for the poor and large population, but without misusing the technology, as was done by the developed countries.

The Chairperson congratulated Shreeyash for picking up an unusual and remarkable case on climate change- known as climate negligence case- from the Dutch District Court in Hague, pronounced very recently in June, 2015. She applauded Shreeyash for dissecting this judgment to examine its civil, constitutional and international law aspects and appreciated his deep understanding of tort of negligence demonstrated in his brilliant presentation. She commented that the development of Environmental law in India got many dimensions from pro-active Indian judiciary. There are many cases where the Indian courts- but higher courts- have struck down the town- planning policy of the Executive from the point of view of citizen's right to healthy environment. However in the Dutch case discussed by Shreeyash, the court examined the adequacy and effectiveness of the policy of the State in the context of its obligation under UNFCCC and ruled it to be illegal and ordered the Government to curb State's GHG emissions as promised in UNFCCC. She advised him to follow up the case as the matter may go in the appeal to the higher courts in Netherlands.

While commenting on Sana's paper the, Chairperson remarked that the paper dealt more with climate change and sustainable development and the discussion on energy issues was not detailed. Initially the mention of Energy Security, interested her, but it was not taken further. Overall, she appreciated Sana's effort, being a student, to come to Delhi to present her paper.

In her general observations, she highlighted that we cannot address the broader issues of climate change or biodiversity without addressing the issue of energy. For instance, renewable energy can play a leading role in addressing climate change mitigation and enhancing conservation of biodiversity. The legal aspects of international energy governance may relate to international trade liberalization, investment protection, environmental protection, energy security, and energy transit etc. However, when we talk about regulation of trade in energy, we do not find any specific mention of in the international law. It is surprising that the trade regime has not dealt with energy issues directly. At the



international level, there is no universal framework exclusively governing global trade in energy. A multi-layered patchwork of regimes has emerged, the largest part of which is the World Trade Organization (WTO). These days we have many new forms of energy like biomass and cogeneration along with old energy form like oil and gas. Question arises –should we regard energy as service or goods. Traditionally, the classification of energy into goods and service did not arrive. Because of privatization and liberalisation, the trade in energy increased, and the establishment of WTO resulted in the division of energy into goods and services. For WTO all primary energy like fossil fuels, oil, natural gas and coal, were considered as goods, whereas the secondary energy which results from the conversion of primary energy like supply of electricity is generally considered as service. But The International Convention on The Harmonized Commodity Description and Coding System (HS Nomenclature) declared Electricity energy as commodity. In European Union Law, Electricity is considered as goods and not service. Electricity energy is thus considered to qualify as a good and by that subject to the rules of the World Trade Organization (WTO). She emphasized that it may be difficult to differentiate between goods and service aspects of trade in energy sector.

At the domestic level, she told that like forest conservation, Indian Government, has enacted 15 years back , The Energy Conservation Act, 2001 for efficient use and conservation of energy. It was felt that by adopting energy efficiency measures, energy consumption can be reduced to a large extent. It has established “Bureau of Energy Efficiency” in 2002 known as BEE, the primary objective of which is to reduce energy intensity in the economy. She cautioned that the understanding of this Act involves the basic knowledge of many technical terms, which are defined in the Act. She also told that the Act has been amended in 2010 . The seriousness of the Government in having such piece of legislation can be judged by 2010 Amendment, that enhances the penalty for offences committed under the Act from 10,000 to 10,00000 (ten lacs).

At the end, the Chairperson thanked all delegates for their wonderful participation with one reservation, in the capacity of Conference Director, that presenters are not attending all the Technical Sessions. She apprised the audience that organizers have taken cognizance of the fact that local candidates are coming mainly for their own presentations. She did not appreciate this way of attending international conference of this level and sounded that it may have an effect on their certificates.



Technical Session – VII

Policy and Management

Sunday, February 14, 2016 | 9:30 am – 11:15 am | Venue: Seminar Hall, CLC

Chairperson: **Professor (Dr.) Afzal Wani**
Professor & Dean, University School of Law and Legal
Studies, GGSIPU University, New Delhi

Rapporteur: **Ms. Anju Sinha**
Assistant Professor, CLC

The Session started on the third day of the Conference in the morning of February 14, 2016, with the introduction of the Chairperson **Professor (Dr.) Afzal Wani**, Professor & Dean, University School of Law and Legal Studies, GGSIPU University, New Delhi by Ms. Anju Sinha and felicitation with memento by Moatosh Ao, Assistant Professors, Campus Law Centre. This was followed by a keynote address by the Chairperson. The Chairperson pointed out that diversity is already there and diversity is in nature itself. Probably the creation owes its existence to diversity. It is difficult to understand what creation is without diversity. Bio is one element of diversity, but taking it, as how people understand it, the diversity is innate even to a single person. However, at present the situation is such that there is a threat to it and we are intelligent enough to understand that threat to diversity is threat to existence. When there is threat to existence, we selfish human beings have started talking about conserving biodiversity. This session is about policy and management, and policy is not merely a policy, policy has to have a source. If it is rightly sourced, it is good but if it is wrongly sourced, it leads to chaos.

He then appreciated the panel of speakers and suggested to all those present to not only listen with eyes and ears open but with an open heart. Only then the Session will invoke some thoughts and ignite questions in the minds of the listeners. Such questions then will help the speakers to further investigate the issues. He also advised the speakers to take questions positively.

The first paper of the Session entitled “*Biodiversity Conservation and Management in India, Brazil and south Africa: Under Law, Policy and Diplomacy in contemporary age*” was presented by **Mr. Amrendra Kumar**, Research Scholar, Centre for International Legal Studies, School of International Legal Studies, Jawaharlal Nehru University, New Delhi. The presenter while stressing upon the significance of natural and biological resources in the overall development of a country specially of bio-diverse countries such as



India, Brazil, and South Africa, talked of biodiversity conservation management as a process which involves promotion, management, and sustainable use of various natural resources. He further elaborated on the role played by these bio-diverse countries in harboring and sustaining immense biodiversity under diversified ecological habitats. These countries have also shown their international commitment in this regard since Rio Earth Summit held under United Nations Conference on Environment and Development. Being a party to various international conventions and treaties they have implemented international principles in their domestic laws and policies as well. The presenter expanded on this aspect by highlighting various laws and policies that have been enacted and implemented in the three countries. He further proposed that these countries should amend the existing legislations and improve the plans and policies for better biodiversity conservation and management.

The second paper entitled *“Protecting the Green Cover in India: Problems in Implementation and Enforcement of Law”* was presented by **Mr. Aditya Narayan Prasad, Advocate, Supreme Court of India and National Green Tribunal, New Delhi**. The presenter highlighted various protection measures, which are aimed at protecting the green cover as adopted in India, and how they are completely divorced from scientific approach. He further criticized the inconsistency in implementation of these policies. In this context an illustration of Delhi Prevention of Trees Act was given. Under this Act cutting of trees is prohibited but because of lack of infrastructure and staff, the Act is not being implemented properly. He emphasized that in face of infrastructural development, the environmental value of trees is completely being disregarded. The presenter highlighted the fact that every geographical area has its unique flora and fauna and they in turn support each other. Since no regard has been given to scientific plantation or replantation of trees, cities are losing their original biodiversity. This further leads to ecological degradation. He concluded with placing emphasis on the urgent need for conservation of biodiversity including green covers with effective policymaking and implementation of the same.

The third paper entitled *“Governance of Transboundary Water Resources with Special Reference to Teesta River-India and Bangladesh”* was presented by **Dr. Shilpa Bagade, Assistant Professor, IMS Law College, Noida, Uttar Pradesh**. The presenter through this paper highlighted the conflict between countries with respect to Transboundary Rivers. The lack of cooperation then leads to mismanagement of natural water in the Transboundary Rivers, which in turn directly affect population depending on such resource and destruction of ecological balance. She illustrated this issue by specifically focusing on Teesta River that flows from Sikkim, India, to Bangladesh. She further elaborated that even though UN



convention on the Law of the Non-Navigational Uses of International Watercourses, 1997 attempts to resolve such issues amongst riparian states, as India and Bangladesh are non-signatories to this convention, the issue of distribution of the river water remains a matter of contention. With both countries planning various hydropower projects on the river also has ill effects on the conservation and management of river water especially during lean periods. The speaker suggested a few possible solutions including a more holistic approach instead of nationalist approach towards river water management, involvement of technical expertise etc.

The fourth and the last paper entailed “*The Importance of Biodiversity and Socio-legal Responsibility for Conservation in India*” was presented by **Ms. Manjula Raghav, Assistant Professor, Amity Law School, Delhi**. She commenced her presentation with a quote by Mahatma Gandhi- “*There is a sufficiency in the world for a man’s need but not for man’s greed*”. She described biodiversity as the variety and variability among all groups of living organisms and ecosystem complexes in which they occur. Furthermore, there are three levels of biodiversity- Genetic, Species and ecosystem. Biodiversity is crucial for sustaining existence, for instance, it helps in production on oxygen, maintaining water circulation, prevention of soil erosion, etc. The speaker brought out certain threats to biodiversity in her presentation, which included, disruption of natural habitat, poaching, mining and man-wildlife conflict. Consequently today we face threats such as global warming, extinction of various species, etc. In her presentation she also highlighted various constitutional and statutory provisions in India, which goes a long way in protection of biodiversity. However there is a failure at the implementation level as there is lack of infrastructure. Her most important suggestion was to take personal responsibility and contribute even if it is a small contribution.

At the end of the Session, during the question hour, few important questions were asked by some other delegates. The question and answer are as follows:

Question and Answer Session

1. **Question (Dr. Pranab Pal to Ms. Manjula Raghav)** Do you think that for the threat to biodiversity, human is also responsible?

Answer (Ms. Manjula Raghav): The concept of sustainable development can be achieved if there is harmony between human actions and the development. We are somewhere ruthless; we are not sensitive towards the environment. And we can do some basic things, for example, use of plastic bags. We are prone to use plastics and we



always criticize as to how will things work without them, we need it on day-to-day basis. We don't think that if we transform our actions, even in the small ways, we can definitely do something about it.

2. **Question (Dr. Pranab Pal to Dr. Shilpa Bagade)** If we approve hydro projects how much would be the effect on the eco-system. Any suggestions with regard to how can we curb the damage on the eco-system in that area?

Answer (Dr. Shilpa Bagade): When hydropower projects are established, the natural course of the river is diversified. When the location for a dam is selected, the government and administration are involved in the decision-making. Sometimes you find a location where the natural course of the river can be followed but sometimes the natural course is diversified, and then after few course, the water is thrown downstream. But where the passage is left empty, there the flora and fauna; the fishery, the animals; and the aqua life is totally spoilt. At the same time the issue of sedimentation also arises. So, the recommendation is that the natural course should not be stopped. Development is required, we require the power projects, the hydropower projects because this the very natural way in which we can generate energy. But at the same time we have to follow the course of the nature. If we work against the nature then we have seen the ill effects of the nature against human life.

3. **Question (Mr. Raman Kaushik to Mr. Aditya Narayan Prasad)** Whether there is accountability or a sanction provided in Statutes, which talk of compensation and transplantation of trees, for non-compliance? The Delhi Prevention of Trees Act provides that for every tree cut ten trees have to be planted and you stated that only 1 % trees would survive out of those. So do we have any sanctions or any time period is allotted for which the person must maintain such trees?

Answer (Mr. Aditya Narayan Prasad): There is no specific law on transplantation and compensation and wherever there are laws, they are also not being implemented. There is a need to have very specific legislation vis-à-vis transplantation, vis-à-vis compensatory plantation or vis-à-vis anything else that we need to do on a very practical ground, on a very practical level. As far as accountability is concerned neither the private individuals nor the government departments are taking responsibility. If a person cut a tree today he has to maintain those five saplings for ten years- nobody cares as to what is happening in ten years. There is no computerized data, which shows that the forest officer would go every day and see whether those plantations are there, or not. The Delhi Forest Department was audited by the Directorate of Audit of Delhi



Government itself and they said that they maintain no plantation registers. The same plantations are shown as replantation again and again.

4. **Question (Mr. Raman Kaushik to Mr. Aditya Narayan Prasad)** Apart from conventional education, that we have at present in India, is there any specific professional or vocational courses for transplantation or compensation management? Can we use environmental ethics as a compulsory subject in all the curriculums from 10th standard to post graduation? Will that be effective?

Answer (Mr. Aditya Narayan Prasad): Yes, there is training happening at the Forest Institute in Dehradun but again it is at a very minuscule level. Nobody knows about it, unless there is demand for it, unless people start taking it seriously there won't be any interest. Yes, environmental ethics can be in curriculum, it is in our curriculum but how effective are we? When we see a tree being cut what do we do? So that is the question that needs to be addressed. We can have a chapter in all schools and in some places there are these chapters but it is the individual responsibility that needs to be looked into.

5. **Question (Mr. Mohib Anwar to Dr. Shilpa Bagade)** How increasing disputes between the countries are threat to the conservation of the biodiversity? What is the connection between the increasing disputes and the conservation of biodiversity?

Answer (Dr. Shilpa Bagade): Regarding the biodiversity and the connection with the transboundaries water governance, which ever the treaties and conventions there are in this regard, they do not devolve on the biodiversity. Basically they have devolved on how the water should be managed for the betterment of the human being at the same time how there should not be any dispute between the states regarding equitable utilization of water. Even if we look at European Convention on Non- Navigation Use of Water it also just mentions that there is a threat to the biodiversity due to the access utilization of water at the upper riparian state. The lower riparian state will not get enough flow of the water, which they require to develop their biodiversity. This is the grey area, which has to be developed in various agreements and in various conventions, which have not focused on the issue of biodiversity in case of transboundary water dispute.

6. **Question (Mr. Mohib Anwar to Ms. Manjula Raghav)** How do you see the overall response of the public to the conservation of biodiversity because in India we do not have any direct legislation, which gives right to the public to stand and claim their own



rights. We see only environment impact assessment rules, those probably from 1996, amended several times, but yet no such right that has been given on national level to the public that whenever there is a threat to biodiversity they can stand and claim their rights. For example, right to public participation, right to have environmental information, right to have access to judiciary. So how would you like to comment on these three things?

Answer (Ms. Manjula Raghav) Public participation is not codified. There is no such legislation. But Public Interest Litigation is a weapon in our hands. We can actively utilize it and judiciary is also taking interest in PIL. Environmental law is the result of judicial activism. Before that we were not active towards our environment, however, it is the creativity of judiciary that has brought out focus towards the environment. Of course, it is yet not codified but again there are movements such as Swachh Bharat Abhiyan. We can do our bit for instance; we all can plant a tree. Yes, I don't possess a big house but two plants you will find at my home. In this way we all can contribute towards the environment.

7. **Question (Mr. Mohib Anwar to Mr. Amrendra Kumar):** How Cartagena Protocol has seen the role of public in conservation on biodiversity because there are so many provisions there but I don't see any real implication of those provisions with regard to the environment preservation, public participation and access to justice?

Answer (Mr. Amrendra Kumar): With regard to the Cartagena Protocol, this has been adopted for the safe transfer and use and the management of the living modified organisms. So the community based participation or their corporation is very sincerely required. Though there have been provisions and recommendations for their participation and corporation in this regard, there are also recommendations about their education as well. This is because they are the major stakeholders and the providers, like the indigenous communities and the local communities, of the genetic material. So basically their participation and the cooperation as such in this particular protocol have been endorsed. It has been noted and recommended in its preamble as well. So this Protocol has been a very important aspect and instrument for advocating for public participation and their cooperation in governance and modification of the living modified organisms, as they are a part of the rich biodiversity.



Observations of the Chairperson

Professor (Dr.) M. Afzal Wani

Professor & Dean

University School of Law and Legal Studies

GGSIPIU, New Delhi

Prof. M. Afzal Wani, who chaired the VII Session, started with the observations that:

“It was a very great occasion to converse on a very important issue that is like a volcano at the base of humanity on planet earth. There is a ‘threat’ which can explode anytime and it’s like a time bomb and the only thing that can save us is our alertness to the threat. It depends on many things and some of them have been discussed in the session.”

He appreciated all the presenters and particularly Mr. Amrender Kumar for bringing the discussion to the international level, who spoke specifically about India, South Africa and Brazil. The Chairperson remarked that it should not be taken as the study for the whole of the world. More study is required though in mathematics there is a concept called ‘factors’ and the position with respect to these three countries may together explain the position in other countries of the world. It needs to be seen in multiple contexts like: What sort of diplomacy they have? What sort of issues they have identified? To which level they can get the coordination? To identify if there are any similar zones that exist on this planet for cooperation and coordination and what criteria be adopted for promoting harmonization further research and appropriate action is required.

There is a lesson to be carried out. The lesson is to learn about earth’s existence. Whether the universe came into existence itself or was created by God. Whatever it may be understood, the fact remains that it is one Unity. It is not separate parts. There is something, which keeps its cohesiveness and then only it exists. It survives because there is coordination in it. It survives because there is a kind of natural process, which is continuing and if you find ‘any particular kind of change’ in it then it can definitely result into some devastation. The human being has existed on this planet and during this existence he has passed broadly through three kinds of stages. (a) The period of “gods”: when he would totally depend on unseen. If there was scorching heat he would get into the cave! If there was a threat from a beast, he would get into the cave! And if there was severe cold, he would get into the cave! Because he wanted to sustain his life and leave everything to gods without doing anything about it as these things (heat, beast and cold) were sent by gods in his perception of things. Thus, he would adjust himself to the situation. But then there was a form of activation in his



mind and he started adjusting the environment according to his own comfort. If the man could sustain on the flesh of the beast then why could not he use the skin of the beast to cover his body and think of a dress? Once he is dressed he is not afraid of the cold, he can apply his mind and can get the environment suited to him rather than himself obeying the odd around.

Then, the man started with assumption and used his mind to conceptualize and got to concepts of law, ethics, management, and policy etc. A man could then understand better the war and peace and causes for them. Today we are at that stage of civilization that the man should now really be civilized. He should be sensitized and whole of the international legal regime related to biodiversity and its sustainability should be look from this perspective. The circumstances around have put man to test to see at which stage of civilization the he proves himself to be. Is he behaving like a man at war or a sensitized and civilized person? Is it that he is alert to threats and responsive to comforts, and at the same time looking at the development of the world in a very balanced way. During the last 100 years we are looking into the constitutionalism in all parts of the world and in that constitutionalism one of the policies was to promote the rights of the people, especially the prime rights to ensure the sustenance of the human being on this planet. The human being can only be civilized when he is conscious of the fact that he has to live with another human being harmoniously. The policies should not be guided by the rule of survival of the fittest. That could have been the thought at the first stage of civilization or at some other stage of society, but not now, when the society is facing challenges together. The nations cannot survive in isolation or by self-aggrandizement. They cannot survive by putting one another down. Please look at the world: God did not create the world flat but he created it in an oval shape, where you cannot have same thing existing at every place. Some where there grow plants, which are medicinally rich; it can somewhere be rich in certain minerals; it can somewhere be rich in wildlife; and it can be rich somewhere in water bodies. It is not the same everywhere and that is why, this whole world being a large family together taken with all wealth at different places is very rich. Separately it cannot sustain longer. We have to take the benefit and use all of it together. It can apply to city, it can apply to a state, it can apply to a country, it can apply to the all the countries together all over the world. This is a policy given by nature itself. That is why, Prof. Wani reminded the listeners again and again that we have to look at this policy as a policy given by nature itself. When you frame the policy at the global level, at the national level, at the regional level or at the domestic level then you have your self-interest prime in that. That is a policy but that is not the policy in consonance with the policy dictated by nature itself. We are in an international conference, not a conference for Delhi or India. In this international conference we should definitely convey to the international community that we should



resolve and find out and frame a policy that will suit the whole of the world. We should have an equal love for the life and beauty and existence of every human being in any part of the world.

The chairman expressed that the scientific tests and the data, which is being presented, is not always correct. Some times the methodology is not correct. The population of the world as it is today can very well comfortably be sustained and maintained by the riches that exist in the world. But it depends on the pattern it is used and how it should be used. The scientific findings and scientific research should always be neutral. There is sometimes politics with it and that politics which is at the back of the statistics makes the things difficult to resolve and that is why you find some times you do not reach to certain conclusions and that makes the effort futile and does not attain its objectives. We need to see the statistics in a very neutral way and in an unbiased way. In case of the use and conservation of energy and biodiversity, issues have to be reconsidered in that way. We need to focus at things that we generally do not bring into focus. At the international level we are definitely looking for a very strong international legal regime and that is getting strengthened day-by-day because the nations themselves are losing the ground. They are not able to maintain themselves without the cooperation of sister nations. Since this is the fact, you all need then to come together and find out the enforcement agencies at the global level.

It should not be that the international law is a weak law. We have to have globally very strong agencies and then at the national level also we should have a concept in mind, which is provided in the Indian Constitution in Article 51 that we have to develop international understanding, we have to promote international understanding. There is a fundamental duty also to contribute towards better understanding of international policies.

If we open our minds to all those realities then definitely something will come out which you may call as “environmental ethics”. Unless there is ethics supporting a law it cannot prove effective. There can be so many kinds of reasons and kinds of causes, which will be created by the unscrupulous ones to defeat you. It is because man can do it and man has done it. Unless that ethics is emerging and coming out of the heart and mind and that is basically regulating behavior of the man, you cannot regulate it only by the institution of law. If you do it then you are coercive and if you are very coercive then you are defeating the rights of the human being again. So if you want to be persuasive; if you want to attain the objectives, then definitely there should be an emergence of a parallel, coincidental and a supplementary regime of ethics that can make things easier. That can in turn bring into existence a management, which will be a persuasive and effective management. That will bring into



existence that kind of awareness, awakening and action that is required for the implementation of the policies and by the implementation of laws.

Democracy was born for all, but we burry it by excluding others both at national and international levels. The democracy has emerged from axiom, which we call- “It is the wearer who knows where the shoe pinches”. Nobody else can know it, nobody else can realize it and that’s why the democracy came into existence. Being democratic is asking you that where your shoe is pinching and what we should do for that? And that’s at the city level, at the state level and at the international level. We have to see it and we have to understand all that pain which is caused by the present system, by the present traditions, by the present regimes, by the present attitudes and that’s very important. If that is democratized then the things will be very different. The chairperson was very confident that with the present laws that exist and their implementation is not very democratic. It is lopsided. There is a big gap between the developed and so-called developing countries. There is a lot of conflict of interest and there is lack of understanding of mutual coexistence and that is why we only take up the instrument of law for solving the problems under an influence of those who are the stronger parties. Because the bare making of the law, the bare implementation of the law and bare enforcement of the law is definitely in favor of the party or the parties which have played the role in bringing that particular law into existence. The trouble begins there and that is why we have to have a critical examination of the policies, the law, the management mechanisms and the history of last more than 60 years of universal declaration of human rights. Where from the resistance is coming for mutual coexistence on this planet? Where from we find that people think that we should have the maximum power in our hands? Where has it lead the people of the world to? Know that please! And then only you will find out that where we have to hit and where we have to go. The chairperson expressed that he would not like to be only philosophical but would also like to be understood jurisprudentially. He also observed that we have to improve our contribution and make it more comprehensive taking it as a global study rather than a study of a few countries and nations.

Continuing his observations, the chairperson observed that mathematics is very important for policy making. If a study is made about a tree, as was done by one of the presenters Mr. Prasad, it can be replicated, tested and multiplied as a variable, an algebraic expression or a common factor. It can help in developing a good harmony in terms of biodiversity and sustainability. If Delhi can be developed into a model for any place in the world or this region is a challenge.

The chairperson also appreciated Ms. Shilpa, who spoke on the Teesta. He suggested that



the study should be more clearly related to the life and biodiversity rather than specifically talking on the management of the river water itself. He suggested that specific studies should be done on all significant the water bodies in the county because water bodies are very important for ecology. When man started settling he first settled on riverbanks and riverbeds. At least it was clear that if you may be thinking that water is inanimate but water does possess some life and that is giving life to other things. He appreciated the paper regarding social perspective of biodiversity as well.

At the end, emphasizing social responsibility, he reiterated that the voice for change should come from within. If the voice does not come from within then things cannot happen. Everybody is talking bout change in mind-set but he expressed that he has been hearing that for 30 years. Every speaker is saying the same, but what should be put in the mind of the people is something about which they are blank. And what we put in others mind unthinkably or emotionally may be having the same defects which are in his mind today. So, you are just spending crores and thousands of crores from ministries on seminars and conferences and telling only one thing that there is a need for change in mindset. You are, in other words, surely not saying what has to be put in the mind. And then what you suggest may be worse than what is in the mind of the people.

There is a need to put a 'receptive device' in the minds of the people. And that receptive device should not only listen to what is happening outside, the receptive device should hear from within also—from within his heart, the inner voice. If you connect and listen to it, that says only one thing that your body can exist only if all the parts of the body cooperate. This body can exist only if there is coordination. And this mind will tell you that I am mind and I am very important but I also depend on all the other parts of the body. So in this way some country is a developed one, some is underdeveloped one, some is developing one; some one is in a posh colony, somebody is in a slum; then definitely they all have to cooperate and coordinate and go together. The chairperson implored that we must shake our inner conscience, shape our policies according to that; shape our laws according to that; and have the management of biodiversity according to that inner voice.



Technical Session – VIII

Traditional Knowledge and Intellectual Property Rights

Sunday, February 14, 2016 | 11:30 am – 1:00 pm | Venue: Seminar Hall, CLC

Chairperson: Professor (Dr.) B.T. Kaul
Chairperson, Delhi Judicial Academy

Rapporteur: Mr. Neeraj Gupta
Assistant Professor, CLC

Eighth Technical Session of the Conference, was chaired by **Prof. (Dr.) B. T. Kaul**, Chairperson, Delhi Judicial Academy, who was introduced by the Rapporteur Mr. Neeraj Gupta, assistant Professor, CLC and felicitated by Moatoshi Ao, Assistant Professor, CLC.

The session was initiated by Prof. (Dr.) B T Kaul (Chairperson), pointing towards the importance and the relevance of the area of conference in the contemporary scenario, especially in developing countries. He also pointed out the importance of the theme in the context of developing country. He said the awareness regarding Traditional Knowledge (TK) and Biodiversity in the sub-continent has arisen due to bio-piracy and bio-prospecting by the Multi National Companies (MNC) and developed countries. He observed that there is urgent need to tackle the phenomenon of bio-piracy. Cases such as *Neem*, *Turmeric* etc. has led to awareness regarding protection of TK. Now we have also started compiling the TK in the form of digital libraries (TKDL), so that we can cross check at the time of filing of a patent application whether it is based on the prior art or existing knowledge.

Chairperson emphasised on the benefits being reaped from TK since time immemorial. TK owes its origin without any assistance from the modern science and still it has proven effective in curing various illness and problems at much cheaper cost than the modern modes of treatments. Over and above, these forms of medicines, based on TK are generally without any side effects that makes their reliability by indigenous people stronger.

There is a need to create balance between the inventions and the traditional knowledge. He said that the current legal system only provides the defensive mechanisms to protect TK and we do not have positive measures. Here also, the area of replication and duplication are vexed questions for the courts. He added that some positive rights have been enacted in the Biodiversity Act, 2002. Certain steps are also being taken at international level as well, to protect the biodiversity and traditional knowledge. He said the Convention on Biological Diversity (CBD) was drafted with the object to conserve the biodiversity and TK, its



sustainable use and to provide for benefit sharing, if access is granted to biodiversity and TK. After these preliminary observations, the Chairperson invited the speakers of the session to present their views.

The First presenter of the session was **Dr. Pushpa Kumar Lakshmanan, Associate Professor, the School of Ecology and Environment Studies, Nalanda University, Bihar.** The presentation was on the topic of *"The Issues and Challenges of Implementing the Nagoya Protocol on Access and Benefit Sharing"*. Dr. Pushpa Kumar (speaker) started with explaining that the Nagoya Protocol on Access and Benefit Sharing (the protocol) is related to the CBD. He explained how the dishonest use of developing countries' biological resources by the multinational companies and sovereigns led to the creation of the CBD. The CBD provides for the conservation of the biodiversity. It has also recognised sovereign right over the resources to the state concerned, state also have right to regulate these resources. They are also entitled to lay down the policies with regard to the resources –which should aim to provide justice to the persons who are involved in keeping and maintaining the TK with regard to biological resources. It also provides that the resources may be shared by the sovereign and access may be given to aliens to the resources with the condition of benefit sharing.

It was observed by the speaker that the Protocol is one of the defensive mechanisms to protect the rights of the TK holder and the sovereign having the biological resources. The positive mechanisms are being deliberated at other forums such as WIPO and WTO however, till date we have no such positive mechanism in place.

The Protocol provides concrete rules with regard to prior informed written consent for access to biological resource and TK. Secondly, the consent has to be obtained on the mutually agreed terms. In addition, benefit sharing also has to take place. The Protocol provides that the state parties shall take the legislative, administrative, and policy measures to provide access to genetic resources as well as TK and benefit sharing regarding them based on mutually agreed terms. The Protocol also gives guidelines in this regard.

Apart from above, the Protocol also takes into considerations the emergent situations and provide exceptions to benefit sharing in case of outbreak of a disease, for non-commercial research and promotion of agriculture. The protocol also provides that the use of resources is not restricted to benefit sharing, it must also lead to benefit of environment.

The speaker pointed out that the CBD was attempted to be implemented in India with the help of the Biological Diversity Act, 2002, (Act of 2002) which provides for constitution of



various agencies under the Act of 2002 for the administration of various provisions. The speaker also highlighted that the Act of 2002 came into force before the Protocol, and due to this, there are certain gaps between the Act of 2002 and the Guidelines under the Protocol which need to be filled up.

Firstly, the Protocol provides that not only the country which is giving the resources must have in place administrative and other mechanisms but, the receiving country should also have in place the mechanism which ensures that the person bringing the resource in the receiving country has complied with the laws of the giving country. This aspect is missing in the Act of 2002.

He also pointed out the distinction between the foreigners and nationals in the Act of 2002. The Act has made provisions that in case of access to genetic resources, both national as well as foreigners have to take the permission of the concerned authority. However, in case of access to TK by the nationals, the Act of 2002 is completely silent. And as far as the exploitation is concerned, it can be done by any person be it a national or a foreigner.

He concluded the presentation with the argument that the Protocol is aimed at the justice to the local and indigenous persons, though the Act of 2002 talks about the consent of the concerned authority, this consent by the concerned authority should be given keeping in mind the justice aspect to the local communities.

Then the speaker referred to the case studies from India and Africa with regard to medicines based on TK and Biological resources. He argued that these cases may be used as guiding lights for benefit sharing

Dr. Neeru Nakra, Associate Professor, Vivekananda institute of Professional studies, was the second to present her paper titled *“Interface between Traditional Knowledge and Intellectual Property Rights: An Indian Scenario”*. Dr. Neeru Nakra (the speaker) started with the examples of use of home remedies for various health problems and how TK has always been part of our daily routine, yet, the student and teachers of IPR have not paid heed to the subject. It remained ignored for a long time and only few years back TK has come to be seen as an important academic area.

The speaker described that TK is one of the branches of knowledge held and passed from generations to generations. Similarly, IPR is also a branch of knowledge. Protection to IPR strengthened with the emergence of WIPO and TRIPS. However, the TK is not getting enough attention.



The speaker asserted that India has definitely attempted to give protection to TK through various methods such as the Protection of Plant Varieties and Farmers' Rights Act, 2001 and the Act of 2002. She asserted that as far as protection of TK through IPR regime is concerned, there are certain obstacles. TK is a collective right and it belongs to the entire community rather than an individual. On the other hand Patent and other IPR laws protect the individual rights.

Secondly, the Patent Act does not protect the knowledge which is part of prior art, thus, making it impossible to protect the TK as it is already in public domain. The Geographical Indications of Goods (registration and Protection) Act, 1999, is applicable only on goods. It is not applicable to mere knowledge.

The speaker highlighted that department of AYUSH is also helping to protect the TK by digitising the information related to TK. The speaker emphasised that TK definitely need protection and argued for a *sui generis* regime for its protection and cited the examples of various countries which have already taken step in this directions.

She emphasised that if we create a protective regime for TK it will consequentially lead to the betterment of the society, especially those who possess the TK. The benefit sharing aspect will lead to their better economic position as well as they will get the recognition as equivalent to the IP creators.

The final presenter was **Ms. Sneha Jheethay, 2nd yr LL.B(H) at Law College Dehradun, Uttaranchal University**. The topic of her paper was "*Protection of Biodiversity and Traditional Knowledge: Issues and Concerns*". The speaker started with the introduction as to how CBD came into existence and the parallel debate on the issue as to how TK should be protected. Should it be protected through IPR regime, adjustment of non-IPR laws or *sui generis* mechanism?

The point is that we have not come to a unanimous decision as to what is the most appropriate way to protect TK. There is not a single theme of IPR where it can be protected. Some portion of TK falls under the expression part, but not fixed in form, making it difficult to protect in Copyright Laws, similarly, the issue of authorship also creates problems with regard to folklore etc. Medicines etc. should fall under Patent law, yet, being part of prior art, not protectable under Patent law. Still, TK is the source of livelihood many people and it needs to be protected.

She emphasised that the legal regime should give equal protection to IP and TK, only then we can attain the justice. She emphasised that till we find the *sui generis* mechanism to



protect TK, we should attempt to protect it through IPR. She concluded that apart from legal protection, we also need to make persons aware about their rights and their enforcement.

Question and Answer Session

1. **Question (Ashish Kumar to all the panellists)** Where and how should we draw a line between a traditional knowledge and superstition?

Answer (Dr. Pushpa Kumar): The dividing line is difficult to draw. However, TK is something which is based on proved results. Superstitions are based on mere belief. TK, we can say that, based on reason to believe.

2. **Question (Parikshit Sirohi to Dr. Pushpa Kumar)** What is the reason that indigenous persons from Africa and other countries prefer traditional medicines? Is it the cost or something else?

Answer (Dr. Pushpa Kumar): The reason is, it is nature based, cost effective, and there are no side effects. The traditional medicines should be called the mainstream medicines, rather than Allopathic. We also need to protect *Ayurveda*, *Siddha*, *Unani* etc. form of medicines. We should protect them as a gesture of thanksgiving to the generations who have contributed in passing this to us. This will lead to justice — justice in exchange, corrective justice and protective justice.

Observation 1: Mizum Nyodu (Assistant Professor, Campus Law Centre) In Arunachal Pradesh, the cases of smuggling are on rise related to genetic resources. However, the Authorities under the Act of 2002 have not been constituted in sufficient numbers, there is only one Biodiversity Management Committee in the entire Arunachal Pradesh.

Secondly, we also find lack of coordination among the enforcement agencies. The forest department officials, the officials under the Act of 2002 and local police just play the blame game and none is responding to the smuggling taking place.

Observation 2: Dr. Erimma Gloria Orie (Lecturer National Open University of Nigeria) It is found that the problems of India and Nigeria are similar in nature.

Observations of the chairperson

Professor (Dr.) B.T. Kaul
Chairperson, Delhi Judicial Academy

The Chairperson pointed out that the first paper attempts to bring the harmony between the international law and domestic laws, and attempts to highlight the gap between them,



which need to be filled up. Secondly, the paper also highlights the fact that the persons having the TK with them are not aware about their rights and it is tough task for the government to educate them. He also said that the now, Regulation of year 2014 of the Act of 2002, is in place, which should have been incorporated in the paper; however, it has been dealt in the spirit rather than the words. Further, the paper attempts to highlight that the Protocol sets the global norms regarding access and benefit sharing and it is an attempt to attain global justice. This point becomes very relevant in the light of divide between the developed and developing countries.

On the second paper the Chairperson observed that the paper enquires whether TK can be dealt in the traditional legal system of IPR or it needs a *sui generis* approach. He also observed that the TK and GI have to be distinguished. Though both fall under the collective rights yet, TK deals with the knowledge itself but GI deals with the goods. GI provides the origin of the goods. Thus, it becomes difficult, that how TK can be protected under the conventional IP Law regime. He observed that the paper also deals with the aspect of fundamental right to culture which is directly related to TK and it also talks about TK in the perspective of spirituality apart from the economic and social rights aspect. The point of holistic approach is very important and TK is the cultural spine of India which can also help in economic and social justice. It can also help in create a healthy society.

For the final paper of the session he observed that this paper specially focuses on TK from the perspective of indigenous people's right to conserve the culture, identity and traditional and cultural expressions. She has given reference to Art 31 UN Declaration on the Rights of Indigenous People, 2007. The Declaration expressly recognises the right to protect and preserve the TK and cultural expressions. The paper also focuses on the issues as to how these can be protected through the IPR regime and what are the gaps. Chair also pointed out that the *Sui Generis* Bill is still pending thus, in interim various laws including IP law can be used to protect the TK.



Technical Session – IX

Comparative / Domestic Laws on Biodiversity and Sustainable Energy

Sunday, February 14, 2016 | 2:00 pm – 4:00 pm | Venue: Seminar Hall, CLC

Chairperson: **Mr. Sanjay Upadhyay**
Advocate, Supreme Court of India
Honorary Managing Trustee - ELDF

Rapporteur: **Mr. Moatoshi Ao**
Assistant Professor, CLC

The Ninth Technical Session which was the final Session of the Conference started with the introduction of the Chairperson **Mr. Sanjay Uphadhyay**, Advocate, Supreme Court of India and Managing partner of the India's first environmental law firm, Enviro Legal Defence Firm (ELDF). Prof. (Dr.) Usha Tandon, Professor-in-Charge and Conference Director, welcomed the Chairperson by presenting a memento to him. Mr. Moatoshi Ao, Assistant Professor, CLC was the Rapporteur of the session.

The Chairperson expressed his pleasure in coming back to the faculty and expressed his gratitude to be in the presence of Prof. Usha Tandon and Prof. B.T. Kaul, his teachers.

The Chairperson thanked his erstwhile professors at Faculty of Law, while revealing that he had initially been admitted to CLC but later shifted to LC-II due to his full time involvement in the filed of environment. He also complemented Prof. B.T. Kaul for his detailed and elaborate skills of teachings. He expressed his gratitude to Prof. B.T. Kaul and Prof. Usha Tandon from whom he learnt the roots from great teachers like them. As the session could only last till 4:00 p.m., Mr. Upadhyay requested the participants to keep their presentations crisp and articulate, with each speaker been given about 15 minutes to make her case.

The first presenter of the session was **Dr. (Mrs.) Erimma Gloria Orie**, Lecturer, **National Open University of Nigeria, Nigeria**. Presenting her paper titled "*Sustainable Wetlands and Biodiversity Conservation: Nigeria's Lagos Lagoons in Focus*" the presenter stated that Wetlands are one of the world's most important environmental assets, containing a disproportionately high number of plant and animal species compared to other areas of the world. However, the rate of loss and deterioration of wetlands is accelerating in all regions of the world including Nigeria. According to her Nigeria has about 14 identified major wetlands, including Sokoto-Rima, Komadugu Yobe, Lake Chad and Lagos Lagoon and



Lekki Penninsula. In spite of Nigeria being a signatory to several international treaties and conventions for conservation and sustainable use of biodiversity, there is no specific national law regulating the maintenance of wetlands. The Lagos Lagoon is one of the most extensive wetlands in the southern region of Nigeria but has witnessed more than 96% loss. She then elaborated on the role of wetlands in conservation of biodiversity like GDP booster, carbon sequestration, flood buffers, source of water, support to agriculture, reservoir of fish, etc. According to the presenter there are various domestic and international laws and policies for regulation of wetland in Nigeria, a few among them are, 1999 National Policy on Environment, National Forest Policy, 2006, National Policy on Erosion, Flood Control and Coastal Zone Management, 2005, The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act (2007) (NESREA), National Environmental (Wetlands, River Banks and Lake Shores) Regulations, 2009, National Environmental (Watershed, Mountainous, Hilly and Catchments Areas) Regulations, 2009, National Environmental (Soil Erosion and Flood Control) Regulations, 2010, National Environmental (Desertification Control and Drought Mitigation) Regulations, 2010, The Natural Resources Conservation Act 1989, Federal Environmental Protection Agency Act, 1990, The Environmental Impact Assessment Act, 1992, etc., and even Section 20 of the Constitution of the Federal Republic of Nigeria 1999. Besides, the domestic legislations and policies, Nigeria also has international collaborative efforts like the Canadian International Development Agency (CIDA), the United Kingdom's Department for International Development (DFID). Furthermore, the World Bank, through its Global Environment Facility "Local Empowerment and Environmental Management Project," is working with the Department of National Parks and Bauchi State in Nigeria to develop capacity for protected area management components (among other activities). The United Nations Environment Programme (UNEP) and United Nations' Food and Agriculture Organization (UNFAO) also supports the cause in Nigeria. However according to the presenter these institutions are expected to assist in the management of the Lagos Lagoon wetlands for the benefit of the immediate community and Nigeria at large, but this has not been the case due to numerous challenges like, absence of law, weak enforcement, capacity building and lack of awareness, the top down approach, invasive species, widespread poverty, urbanisation, flooding and erosion, impact of population and recognition of market or economic value. The presenter concluded her paper by suggesting some strategies and recommendations for conservation of wetlands in Lagos Lagoon Wetland, like, there is an urgent need to transmit the International Conventions into the Nigerian body of laws; a strong institutional framework is essential for proper enforcement of law; urgent need to improve the knowledge



of change in wetland areas in Lagos state, and to improve the consistency of data on change in wetland areas in published papers and reports; The Nigerian government should recognize biodiversity conservation as feasible investment in Nigeria's economic development and consequently incorporate natural resources valuation fully into the national economic planning; and population control, etc. The important recommendations recommended by the presenter includes, the government should adopt a mechanism that will use the invasive species particularly water hyacinth, Nypa palm and cattail (*Typha* sp) as raw materials for production; the government should enact a comprehensive wetland protection legislation and in addition place Lagos Lagoon wetland on gazette (and by extension all wetlands in Nigeria) as a conserved urban ecosystem that should not be developed; Recognize and maintain local community rights to wetland resources in the laws; and Integrate community management of wetlands and compensation for environmental services into national development policies and the proposed wetland law.

The Second presenter **Dr. Stellina Jolly, Faculty of Legal Studies, South Asian University, New Delhi**, presented a paper titled *"Role of Judiciary in Bio Diversity Enforcement and Compliance: Comparison between International Court of Justice and Indian Judiciary"*.

Dr. Stellina investigated into role played by international court of justice for biodiversity protection. She enlightened elaborately how environmental principles pertaining to bio diversity protection has been argued and how it has been considered by International Court of Justice in the case of Pulp Mills case and Gabčíkovo-nagymaros case. She also cited other cases like Corfu Channel case, Nuclear Tests case, Traction case, etc. Dr. Stellina through a catena of cases dwelled into the role played by Indian judiciary in protecting and bringing compliance to India's international commitment at bio-diversity protection. She highlighted that in compliance to United Nations Conference on Human Environment, Stockholm, 1972 the government of India amended the Constitution and inserted Article 48A and 51A(g) and also enacted various legislations like the Water Act, 1974, Air Act, 1981, Environment (Protection) Act, 1986, etc. The rule of *locus standi* was modified by Supreme Court of India adopted and concept of Public Interest Litigation was brought into operation. Article 21 of the Constitution was interpreted to include right to a healthy and clean environment. The presenter cited numerous landmark cases decided by the Supreme Court of India substantiating the role played by the Indian judiciary. *Narmada Bachao Andolan v. Union of India*, *Vellore Citizens' Welfare Forum v. Union of India*, *T.N. Godavaram Thirumulpad v. Union of India and ors*, *Indian Council for Enviro - Legal Action v. Union of India*, *Vellore*



Citizens Welfare Forum v Union of India, A.P. Pollution Control Board v. Prof. M.V. Nayudu, etc. are some cases cited by the presenter in which the Supreme Court of India has applied various International Environmental Law Principle. The presenter concluded stating that a perusal of cases decided by ICJ and Indian judiciary reveals that, domestic judiciary has been more successful in terms of articulating environmental principles, applying in the context of the case and ensuring compliance. According to her “at the international level very few cases have been addressed relating to environmental concerns. States feel more at ease in basing their arguments on other treaty mechanisms than environmental law provisions”. Thus, a comparison will reveal that role of judiciary at the domestic level has been more successful in terms of rich environmental jurisprudence and compliance.

The final presenter of the session **Ritupriya Gurtoo, Assistant Professor , Department of Law, Prestige Institute of Management and Research, Indore, Madhya Pradesh** presented her paper titled “*Enforcement and Compliance of Judicial Pronouncements in Biodiversity: Indian Perspective*”. The presenter started her presentation by highlighting on the importance of biodiversity for ecosystem like genes, species, poverty, degraded ecosystem, etc. She highlighted the various International Conventions with regard to biodiversity and sustainable development like, Convention on Biological Diversity (CBD), the Basel Convention, International Convention on oil pollution preparedness, response and cooperation, 1990, International Maritime Organization (IMO), International Convention for the Prevention of Pollution of the Sea by Oil (OILPOL) was adopted in 1954, Convention on the Prevention of Marine Pollution by the Dumping of Wastes and other Matter (London Convention), 1972, Protocol Relating to Intervention on the High Seas in Cases of Pollution by Substances Other Than Oil, (1973), etc. She expounded on the role of Indian judiciary with the help of various cases decided by the Supreme Court of India. *Francis Coralie Mullin v. The Administrator, Union Territory of Delhi, Subhash Kumar v. State of Bihar, Calcutta Wetland Case, Doon Valley case, Narmada Bachao Andolan v. Union of India*, etc. According to the presenter, the proactive role of the judiciary is countering the challenges of biodiversity even in the absence of domestic law. She also suggested that the courts should step into the shoes of legislature and make laws in the light of international conventions. While the core issues of biodiversity loss are well known, the role that judges can play to alleviate the crisis is less considered, even by judges themselves. The presenter concluded that firstly the Courts in India have played a distinguishing role in gradually enlarging the scope of a qualitative living by applying various issues of environmental protection, and secondly, the active role played by the Indian judiciary in the past two decades has redefined its place in India’s society.



Question and Answer Session

1. **Question (Tanveer Ahmed to Ritupriya Gurtoo)** How does judiciary react to such cases where there is limited or absence of comprehensive research as for instance the recent CNG case?

Answer (Ritupriya Gurtoo): The main point of concern is somewhere somebody has to take the first step. If there is no comprehensive legislation of policy on a particular fact, the only recourse left for us is to go to the judiciary. I understand judiciary is overburdened, I do understand we do have so much of experts, but then experts are not there even in relation to company law or in relation to other IPR if you talk about, so why do you distinguish environmental law. It is just a matter of the fact, you take one-step, and the entire thing will fall in place. That one-step is not taken either by legislature or by the judiciary. Who takes the first step that is the question?

2. **Question (Dr. Pushpa Kumar to Dr. Stellina Jolly)** Sustainable development is understood by many jurisdictions as an concept or as an approach towards development. How do you think it could take the shape of a principle? Secondly, to my understanding by reading judgements sustainable development is more of development and it is never sustainable. Is it true?

Answer (Dr. Stellina Jolly): Thank you Pushpa. I can only give my perspective because there is nothing called right and wrong. It is an endless discussion. I agree with your point that today sustainable development is on development. This linkage has come into existence because of the third world approach. I feel that developing nations could actually change the discourse of the subject from environmental protection to sustainable development. Regarding the approach or concept, even the same thing is applicable in terms of precautionary principle. European Union considers it as a principle of customary international law while United States consider it as an approach. Rather than bringing it as a substantive law, the utility of sustainable development is an integration, it is an procedural requirement. If you see the Rio principles, a combined reading of principle 3 and 4 shows that there is an unqualified right to development. All developments may not be sustainable, but you need to maintain a balance environment and economy. In CMC case it was held that sustainable development is a part of customary international law, but how the principles will be invoked and applied and how do you bring about that balance and that remains a problem for judiciary. There is no clarity in the international community in the wording of sustainable development because today sustainable development is



not a mere integrating principle. If you look at the Delhi Declaration of Sustainable Development, how the international national law association has clarified and how the various jurists which is working on the environmental laws clarified. They said sustainable development has various components, polluter pay, precautionary, environmental impact assessment, duty of consultation, and eradication of poverty, whatever under environmental law or even good governance is part of sustainable development. So, it is like the rule of law, how it is evolved. So, I don't think that when you have so many dimensions and components to a concept, whether that is actually ever capable of becoming a principle in the normative status.

3. **Question (Professor (Dr.) Usha Tandon to Mr. Sanjay Upadhyay)** We are witnessing a trend how the environmental judgements are delivered. They are unlike other judgements. In the last para of the judgement there are directions. In addition the court also constitute various committees to observe or supervise. There are also contempt and curative petitions being filed. There are reports that the orders and directions of the Supreme Court are actually not being complied with. We come to know environmental laws by reading the judgements. Tell us something beyond those judgements and directions to what extent they have been followed.

Answer (Mr. Sanjay Upadhyay): The Court today has a very enthusiastic way of issuing continuous mandamus in most of the environmental cases be it M.C. Metha matter, be it Godavarman, etc. In Godavarman case, there are 557 or 558 orders, which are effective orders, which has national implications, state implications. Not many people including lawyers and judges know about it. So one thing is to share knowledge of these decisions, etc. The other thing is the linkage it has with other decisions on environment. For example, today the entire environmental jurisprudence in the Supreme Court, you will find it revolving around Godavarman, Goa foundation, Bombay natural history society case, etc. So there 4 to 5 cases that rule the rule territory, but the linkages are not known. So one thing is that the sheer volume of these directions which has implications and unless you are suffering those directions you really don't come to know about it. The way rosters happen in the court the call of benches change in the court, it is very difficult for them to find what's been said in 1995 or so on. Unless the civil society is by and large aware of what's happening in their area and there are also lawyers who understand the court and the field reality, often it gets unnoticed and that is the biggest problem of so many orders that are there on environment which are implemented. For example if you look at the Godavarman



decision of defining forest, there entire concept was revisited by lata german in 2011 but many people do not understand the lata german which are very North Eastern context, Meghalaya is a very different State versus what happens in the genetic forest area. So, I think the linkages are a very huge issue that we are facing. Now there is a solace in the NGT, because lot of the forest cases are transferred to NGT. So, now NGT is playing a central role. It is more aware than the regular courts.

4. **Question (Ranidipa Gosh to Ritupriya Gurtoo)** When a dam is constructed, biodiversity or the area should be taken care of, so are you referring to river biodiversity in which the dam is constructed and if so is there any legal provisions for protecting the river biodiversity.

Answer (Ritupriya Gurtoo): In construction of a dam, the biodiversity of the river would be a paramount concern, but when you construct the dam that too in a uncontrolled manner that do not have a sound management than it causes harm to the land, air and also the river. So the concern is not only on the river bed, but subsequently all other things will be taken in consideration.

Observations of the Chairperson

Mr. Sanjay Upadhyay

Advocate, Supreme Court of India
Honorary Managing Trustee – ELDF

After the presentation of the first paper of the session Dr. Erimma, the Hon'ble Chairperson Mr. Upadhyay complimented her on how well laid-out her problem statement was and remarked that Nigeria's problems were similar to those in India till 2010, when a legislation dealing with wetlands was passed here. The Hon'ble Chairperson exclaimed Dr. Stellina Jolly how she was "true Indian" as she had studied and worked in many parts of the country. The Hon'ble Chairperson thanked her for familiarizing the audience with how the world is dealing with the issue of biodiversity. After the final presenter of the session Ritupriya Gurtoo the Hon'ble Chairperson said that he wished she had spoken on the National Green Tribunal and advised her to visit courts more often to see how burdened they were and how difficult it was for them to take *suo motu* cognizance of issues. According to the Hon'ble Chairperson the judiciary needed to keep innovating to deal with the scientific questions involved in biodiversity problems and stated that National Green Tribunal (NGT) is a good mix of science and judicial knowledge to iron out differences. When a member of the audience (Dr. Pushpa Kumar) asked if sustainable development had been reduced to just



development, the Hon'ble Chairperson, Mr. Upadhyay responded by saying that the situation was quite complicated as each environmental clearance for any project was riddled with numerous conditions but there was no mechanism in place to monitor whether these conditions were being respected. On being asked by Professor (Dr.) Usha Tandon to comment on whether Supreme Court directions on protection of the environment were being implemented, he replied that most people, including lawyers and judges, were not aware of many of such directives because of the sheer volume of such orders. The NGT was slightly better informed in this regard, he added.

In his concluding remarks, the Chairperson explained how customary practices of wetland management had not been included in the legal framework. This exclusion of local communities has also been witnessed in the relationship they share with State Biodiversity Boards. He also demonstrated the way the system works by sharing a few anecdotes from the cases he has fought, most notably the Dibang Dam case in Arunachal Pradesh where the project was initially rejected by the Advisory Committee three times but was given clearance when the new government changed the Advisory Committee. In addition, he rued over lack of research with regard to the downstream impact of dams on rivers. But, basin studies, being conducted by the government, were a step in the right direction according to him. Mr. Upadhyay signed off on an optimistic note, hoping that such efforts will strength environmental jurisprudence in the years to come.



Summary of Discussions



CONCLUSIONS

1. In India there is no law which specifically defines or protects wildlife corridors, or prohibits development within, and around important corridors. Though wildlife corridors have found mention in certain environmental and wildlife laws and guidelines, these legal measures have hardly been used by the government to protect wildlife corridors and have remained largely dormant in the area of corridor protection and management.
2. Population pressure, deficiency and weak institutional scaffold have frequently been viewed as the predominant fundamental causes of forest reduction and degradation in developing countries. In India more than 80% of total house grasp and 95% of the population make use of biomass fuel and coal. It is estimated that 4-5.5 lakh premature deaths are going on annually in India from indoor air pollution revelation in particular among children under 5 and adult women 12-20 million disability used to life year are lost due to indoor air pollution.
3. In India, the use of various chemicals in pesticides and chemicals such as lead and arsenic found in industrial wastes are a cause of heightened threat to humans and animals life alike. For instance, the toxic wastes in water bodies ultimately find its way to humans through food chain and consumption of water, which is sourced from these water bodies. This consequently results in ecological degradation and problems such as climate change. For example, the extinction of vultures due to the use of a common anti-inflammatory drug administered to livestock known as diclofenac.
4. According to the report of the World Wide Fund up to 300 people are killed by elephants in India in a year. The main reason elephants invading human habitat or farms are in search of food. *Parthenium genus* (American grass) is very harmful herb to the environment and socio economics. It is progressively spreading in India at a fast rate. *Parthenium* weed is main competitor of grasses, eaten by elephants and as a result of which the elephants are compelled to move out in search of food.
5. It is estimated that up to 13 percent of global fisheries have collapsed due to commercial overexploitation of the world's fish stocks. Coastal areas are also under threat and approximately 30 - 35 percent of critical marine habitats such as sea grass, mangroves and coral reefs are estimated to have been destroyed. Although, Marine Protected Areas (MPAs) have been established to conserve the biodiversity of the oceans, yet, only approximately 1% of the world oceans are protected as compared to 12% of the land area.



6. The UN Convention on the Law of the Seas III, 1982 (UNCLOS) provides the legal framework for governance of the oceans and the seas and lays great importance on the preservation of the marine environment. However, there are legal and implementational gaps in the conservation and sustainable use of Marine Biodiversity Beyond Areas of National Jurisdiction (BBNJ) and the existing legal framework for addressing BBNJ is inadequate. The legal gaps arise due to limitations in international law and agreements to protect the biodiversity while the implementation gaps flow from insufficient and uncoordinated efforts or from overlapping scope of existing agreements. Both the 'High Seas' and 'The Area' fall beyond areas of national jurisdiction and hence states cannot exercise any laws for monitoring or for declaring marine protected areas in these regions.
7. The existing UNCLOS regime is silent on the Marine genetic resources (MGR) and only refers to the mineral resources in the Area. Marine scientific research (MSR) in Marine Areas Beyond National Jurisdiction (ABNJ) does not require any permission from the coastal state and is a part of the freedom of the high seas. Bio-prospecting is therefore open to all States in the ABNJ as it is the common heritage of mankind, except for the general obligations to protect the marine environment which is specifically mentioned in the UNCLOS.
8. The Ganges river basins support more than 10% of the world's human population. An estimated 260 million litres of industrial wastewater, largely untreated, is discharged by hundreds of factories, while other major pollution inputs include runoff from the agricultural fields. More than 6 million tonnes of chemical fertilizers and 9,000 tonnes of pesticides are used annually within the basin. The Ganga also has the richest freshwater fish fauna (378 species). Two species of dolphins are found in the delta: the Irrawaddy Dolphin (*Orcaella brevirostris*), and the Ganges river dolphin (*Platanista gangetica gangetica*). There is a threat to the Gangetic Dolphin due to Poaching, Accidental Killing, fishermen competition, Construction of dams and barrages, Irrigation, Riverine River Extraction, Sedimentation, Pollution, Depletion of Prey Base, etc. Despite various steps taken by the Government the threat to the Gangetic Dolphin continues and their population is estimated to be around 1600-1700 individuals. Therefore, rapid conservation actions are required before the Gangetic Dolphin population declines irreversibly.
9. The current legal regime fails to appreciate the critical role played by women in food subsistence and managing biodiversity. Women's involvement is limited to token



representation without allowing for actual decision making. The existing legal framework does not secure or promote women's right to grow or gather food, feed and sustain their households as it is directed towards facilitating commercialization of agrarian and other natural resources.

10. Although numerous domestic and international law has been adopted recognizing various rights of indigenous people but the implementation of the protection systems is a dream still to be achieved. One of the reasons being these communities lacking political awareness and absence of agitation on their part. Therefore, responsibility to protect these communities rests upon nation states and governments because their existence is essential for the protection of nature and bio diversity.
11. Redistributive energy justice in the context of India would mean that everyone despite their standing in society enjoys access to secure energy which has been generated in a clean way with minimal possible damage to either nature or human life. Several government reports reflect the situation of energy injustice in India i.e. energy poverty in rural India where a huge number of households do not have access to modern energy resources. Deprivation from modern energy services and dependence on inefficient and unclean sources of fuel for cooking and lighting also has its attendant negative health consequences discriminately affecting the poor the most. As far as India is concerned, in 2004 WHO estimated that indoor pollution is likely to cause 4,88,200 deaths per year as compared to 1,19,900 deaths caused annually by outdoor pollution. Despite acknowledging and often even quoting these findings by WHO, the Government of India has not undertaken any research to study pollution related mortality in the country or to study the effect of pollution in rural areas.
12. Sundarban plays a vital role in preserving biodiversity in Bangladesh. However, biodiversity is in threat due to human induced and natural causes. Already, 12 wildlife species have become extinct from Bangladesh. In addition, 40 Mammals, 41 birds, 58 reptiles and eight amphibians have listed in red data book of threatened animals of Bangladesh. Lack of adequate conservation efforts to maintain and protect indigenous crop genetic resources reduce propagation of species. Hence, the habitats of other lives are seriously hampered. One of the major threats of biodiversity of Sundarban found the "top dying" disease of the Sundari trees. Besides the poaching and hunting, lack of public awareness and shortage of trained manpower about biodiversity preservation is a major concern for loss of biodiversity in the study area.



13. Climate change and loss of biological diversity is directly related to food security. Conservation of biodiversity plays a vital role in ensuring food security, as well as in other medicinal purposes like, pharmaceuticals, herbs and traditional knowledge etc. The effects of climate change on agriculture leads to hunger and poverty.
14. Shifting agriculture (Jhum cultivation) practiced in the North Eastern region of India results in loss of soil nutrients and invasion by weeds etc. as a result, the forest cover in this region is rapidly decreasing and ultimately the loss of biodiversity.
15. There has been a general trend in Post world war I and II towards creation of Global organisations, for example WTO, WIPO, ILO, etc. Some of them proved to be very potent like WTO and others like ILO were not so effective. So if one is inclined to generalize on the basis of success or failure of existing organisation may find evidences inconclusive on either side. But an enquiry in the light of cost-benefit analysis is demand of the day. The current international environmental structure is having many fault-lines. The creation of a Global Environmental Organisation must not be a monolith with great centralizing tendencies. The major arguments in favour of Global Environmental Organisation are *inter alia*; it will lead to coherent emphasis on environment issues both internally i.e. between various environmental organisations like IUCN, UNEP etc. And externally vis-a-vis other issue based international organisations like WIPO, WTO, WHO and may be also with international agencies like IAEA. Lack of coordination has resulted into a scenario where, after collapse of Kyoto Protocol, there doesn't exist even a single binding climate change treaty. One of the important structural issues which have been explored is the role of Non-governmental organizations in this kind of Organization. Generally, International organizations allow representation by State players only. Even if one fundamentally disagree with membership of Non-governmental organizations in recommended international organization but one can argue for some status like observer status for them, given the role played by them in environmental issues historically.
16. Conservation of biodiversity in wake of biopiracy unfolds multifaceted issues regarding the commercial potential involved in these biological resources and the associated knowledge. But, the predicaments get exacerbated when some ultimate products based on these genetic resources are protected by the Intellectual Property rights and commercialized. Though conservation of biodiversity is not a part of the Agreement on Trade-Related Aspect of Intellectual Property (TRIPS), but biological resources constitute valuable property which get translated into major economic and technology



gains and the country of origin of the concerned genetic resources remain deprived of its legitimate share of the profits generated out of them. Moreover, TRIPS does not require to provide evidence on 'Prior Informed Consent' from the holders of Bio-resources. Also, TRIPS is silent as to ensure fair and equitable sharing of benefits between the patent owner and the resource owner. Certainly, the inclusion of disclosure requirement in national law would leave the global biopiracy problem unanswered unless the said inclusion is advanced at international level too.

17. Although there have been improvements in Tiger conservation in recent years, there are few reliable data on almost all aspects. The Tiger's secretive way of life in dense forests and its vast range hinder attempts to obtain a clear idea of the numbers. Attempts to perform a total count in India, which has more than half the surviving Tigers, have been criticized on the grounds of faulty methodology and the announced results have been attacked as exaggerated. It can only be said that we do not know how many Tigers there are nor do we know whether they are declining in number, stable, or increasing. Whatever the truth, the remorseless erosion of habitat and prey depletion continues and is the ultimate threat to the Tiger's survival in the wild. Poaching and trade in Tiger products are covert activities. Seizures by the authorities represent only the tip of the iceberg in relation to what the total contraband must be. It is a situation similar to that of the illegal drug trade. Some of those tracking illegal activities believe that traders have become more circumspect, making it more difficult to detect them.
18. Migratory species require protection during the entire stage of their migratory routes in order to maintain or restore their populations. These animals may utilize many different habitats under different jurisdictions for activities such as feeding, resting, mating, and nursing. Different legislations and regulations among these jurisdictions or range states can result in ineffective management. If a specie is unprotected and there is a lack of regulation in one of its necessary habitats, the management strategies implemented in the more restrictive jurisdiction could be nullified. This indicates the need for a uniform set of laws protecting these species throughout their migratory routes. As migratory species cross international boundaries, the inter-jurisdictional management issues become more complex. In this context, a common framework treaty such as the Convention on Protection of Migratory Species of Wild Animals 1979 (CMS), provides a good example of a concerted international legal effort to address the issue.
19. There is an existence of an actual or potential conflict between the Agreement on Trade-Related Aspects of Intellectual Property Rights, 1994 (TRIPS) and the Convention on



Biological Diversity (CBD). Three provisions of the CBD which have a contentious bearing on the intellectual property rights are Articles 15, 16 and 19. Coupled with the Access and Benefit Sharing (ABS) requirement of the Nagoya Protocol, the above three Articles run contrary to the neo-liberalistic setup of TRIPS. Thus, these two conventions appear to be in conflict with each other with the indigenous people favouring protection under CBD and the industry seeking protection under the TRIPS umbrella.

20. There is no international energy law as such to regulate energy trade. The WTO rules are applicable to trade in energy good and services. But, there is no separate Agreement under the institutional frame work of WTO. The GATT/GATS have not defined the energy trade and trade in energy is not expressly included in its purview. As the population increases the demand for energy also increase, which results in increasing of energy trade. It affects environment as well as the biodiversity. So the increasing energy needs and privatization of state owned entities, the relationship of energy trade and environmental pollution, debate on sustainable development etc. is strongly compelling the WTO to adopt some policy framework towards the regulation of trade energy.
21. The question whether the existing IP regime and the flexibilities provided by the legal framework is adequate for healthy development and dissemination of green technologies to developing countries evokes mixed response. Therefore, there is no single policy solution or balancing mechanism to solve the issue of sustainable access to Environmentally Sound Technologies (ESTs) by developing countries.
22. The call for developing countries to resort to compulsory licensing mechanism is a laudable step, but may not be a very feasible one as it poses an unattainable standard. Firstly, the private sector is increasingly insensitive to appeals of 'equity' or imbalance and thus in no case would respond to attempts to create balance between countries by means of transfer of technology from one to the other. Secondly, the kind of licensing we see in the agricultural and medical or pharmaceutical field can thus be considered as 'humanitarian licensing' and thus would involve asking developed nations to agree to forego their national favoritism in licensing publicly funded inventions, at least with respect to technologies of global environmental importance. Thirdly, licensing as a policy balance might not be very attractive if a direct export of a given technology is more profitable than investments in local manufacturing. Finally, valuation of a license in the course of licensing negotiations would require looking into investment by the licensor, licensee's potential profits and prospective benefits from not licensing.



23. The *urgenda*, Foundation case of the Netherlands, Hague, District Court compelling the Government of Netherlands to fulfill its obligation by nature of its duty of care to achieve its objective of 25% deduction of GHG emission under UNFCCC is appreciated. Despite the *Urgenda* decision an admixture of European, international and Dutch law, it still bears a resemblance to the legal situation in India.
24. There is need for collective responsibility for effective implementation of the mitigated climate policy in quest for the energy security. A major obstacle to implementing improved access to energy is that states and communities do not have the financial means or the technology to do so. Poverty alleviation and economic development require more widespread provision of energy resources and services, which will adversely impact on human and environmental security unless energy needs are met in a sustainable way through the use of more efficient and sustainable distribution, generation and consumption technologies.
25. The conservation and management of biodiversity sometimes comes into conflict with the crucial requirements of ecological survival, development needs and public pressures, which led to the sacrifice of priceless biological resources and natural heritage. India, Brazil and South Africa holds greater responsibility and accountability as biodiversity rich countries in the world. Biodiversity laws and policies have been made along with rules, regulations and institutions for effective protection and management in these nations. However, there are certain challenges in execution and operation of such plans and policies in contemporary age due to economic aspirations and technological development under persistent restraints of insufficiency of funds and technology as well as lack of awareness and political will towards biodiversity conservation and management.
26. In the bio-diverse countries such as India, Brazil, and South Africa there are some inherent problems prevalent in their legal system and contain issues like ownership of biological resources, definition of certain terms, conflict of norms with existing laws, exception to academic and scientific research on ABS, bioprospecting and bio trade, sharing the equitable benefits, identification of the rightful holder of the resources, rights of the indigenous peoples and local communities, intellectual property rights, institutional literacy, lack of capacity development methods and information management mechanisms for the biodiversity conservation and management.
27. The problems in protecting the green cover in India suffers due to implementation and enforcement of laws besides being completely divorced from scientific approach. As for



instance, the Delhi Preservation of Trees Act, 1994 prohibits the cutting of trees but because of lack of infrastructure and staff, the Act is not being implemented properly. The workers engaged for carrying out the process usually have no sympathy or concern for the trees and a majority of trees perish. There are no transplantation guidelines of the Centre or the States. There are no guidelines as to which species of trees can stand the rigors of transplantation and how the process should be carried out. Every geographical area has its unique flora and fauna and they in turn support each other. Since no regard has been given to scientific plantation or replantation of trees, cities are losing their original biodiversity. This further leads to ecological degradation.

28. The lack of cooperation in cases conflict between countries with respect to transboundary rivers leads to mismanagement of natural water in the transboundary rivers, which in turn directly affect population depending on such resource and destruction of ecological balance eventually. Teesta River that flows from Sikkim, India, to Bangladesh is one such example. Even though UN Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997 attempts to resolve such issues amongst riparian states, as India & Bangladesh are non signatories to this convention, the issue of distribution of water and its management is straining Indo-Bangladesh relations despite Indian attempts at reviving the relationship with Bangladesh to a new level of trust & cooperation. Adding more adverse effects on the ecology both countries are planning various hydropower projects on the river which has ill effects on the conservation and management of river water especially during lean periods.
29. Nagoya Protocol is an instrument of global justice. Innumerable number of population in developing countries suffer from poverty and hunger, still they are living repositories of traditional knowledge and they contribute to biodiversity conservation. There have been attempts to misappropriate their knowledge and biological resources to make new inventions. Such inventions are patented in many countries and used to make enormous profits. However, the population that offered knowledge or their services to conserve the biological resources have not been adequately compensated. The Nagoya Protocol is thus an attempt to bridge the gap.
30. How far the Biological Diversity Act, 2002 (BD Act) meets the requirements of the Nagoya Protocol and what needs to be done in giving effect to the provisions of the Protocol so far as India is concerned. The BD Act and the access and benefit sharing (ABS) Guidelines take care of most of the provisions of the Nagoya Protocol and country need not enact any new law to implement the Protocol. Instead, what is required



is to introduce certain provisions within its existing legal framework to fruitfully implement the Protocol.

31. Traditional Knowledge (TK) is one of the branches of knowledge held and passed from generations to generations. Similarly, IPR is also a branch of knowledge. Protection to IPR is strengthened with the emergence of WIPO and TRIPS. However, the TK is not getting enough attention. India has definitely attempted to give protection to TK through various methods such as the Protection of Plant Varieties and Farmers' Rights Act, 2001 and the Indian Biological Diversity Act, 2002. However, so far as protection of TK through IPR regime is concerned, there are certain obstacles. TK is a collective right and it belongs to the entire community rather than an individual. On the other hand Patent and other IPR laws protect the individual rights. The Patent Act does not protect the knowledge which is part of prior art, thus, making it impossible to protect the TK as it is already in public domain. The Geographical Indications of Goods (Registration and Protection) Act, 1999, is applicable only on goods. It is not applicable to mere knowledge.
32. How TK should be protected, should it be protected through IPR regime, adjustment of non-IPR laws or *sui generis* mechanism? The point is that we have not come to a unanimous decision as to what is the most appropriate way to protect TK. There is not a single theme of IPR where it can be protected. Some portion of TK falls under the expression part, but not fixed in form, making it difficult to protect in Copyright Laws, similarly, the issue of authorship also creates problems with regard to folklore, etc. Medicines etc., should fall under Patent law, yet, being part of prior art, not protectable under Patent law. Still, TK is the source of livelihood many people and it needs to be protected.
33. Indian Copyright Law impliedly provides for protection traditional knowledge of indigenous people under Section 31A of the Indian Copyright law, which protects the unpublished Indian work. However, there are major drawbacks in protecting traditional knowledge with copyright. They are, Authorship, Protection for Limited Time and Fixed form.
34. In spite of Nigeria being a signatory to several international treaties and conventions for conservation and sustainable use of biodiversity, there is no specific national law regulating the maintenance of wetlands. The Lagos Lagoon is one of the most extensive wetlands in the southern region of Nigeria but has witnessed more than 96% loss.



35. Despite various domestic laws and policies for regulation of wetland in Nigeria namely, 1999 National Policy on Environment, National Forest Policy, 2006, National Policy on Erosion, Flood Control and Coastal Zone Management, 2005, The National Environmental Standards and Regulations Enforcement Agency (Establishment) Act (2007) (NESREA), National Environmental (Wetlands, River Banks and Lake Shores) Regulations, 2009, National Environmental (Watershed, Mountainous, Hilly and Catchments Areas) Regulations, 2009 etc., and even Section 20 of the Constitution of the Federal Republic of Nigeria, 1999. Besides, the domestic legislations and policies, Nigeria also has international collaborative efforts like the Canadian International Development Agency (CIDA), the United Kingdom's Department for International Development (DFID). Furthermore, the World Bank, through its Global Environment Facility "Local Empowerment and Environmental Management Project," is working with the Department of National Parks and Bauchi State in Nigeria to develop capacity for protected area management components (among other activities). The United Nations Environment Programme (UNEP) and United Nations' Food and Agriculture Organization (UNFAO) also supports the cause in Nigeria. However, these institutions are expected to assist in the management of the Lagos Lagoon wetlands for the benefit of the immediate community and Nigeria at large, but this has not been the case due to numerous challenges like, absence of law, weak enforcement, capacity building and lack of awareness, the top down approach, invasive species, widespread poverty, urbanisation, flooding and erosion, impact of population and recognition of market or economic value.
36. A perusal of cases decided by ICJ and Indian judiciary reveals that, domestic judiciary has been more successful in terms of articulating environmental principles, applying in the context of the case and ensuring compliance. At the international level very few cases have been addressed relating to environmental concerns. States feel more at ease in basing their arguments on other treaty mechanisms than environmental law provisions. Thus, a comparison reveals that role of Indian judiciary has been more successful in terms of rich environmental jurisprudence and compliance.
37. The proactive role of the Indian judiciary is countering the challenges of biodiversity even in the absence of domestic law. The Supreme Court of India has been proactive in importing sustainable development principles from international environmental law into the Indian law through different judicial tools and strategies. The Courts in India have played a distinguishing role in gradually enlarging the scope of a qualitative living



by applying various issues of environmental protection. Consequently, many activities posing a major threat to the environment were curtailed so as to protect the individual's inherent right to wholesome environment.

SUGGESTIONS AND RECOMMENDATIONS

1. The present legal framework on wildlife corridors in India, needs to be supplemented with political will and a growing awareness about 'the ecological argument'.
2. The prescription of qualitative conservation goals in European instruments is a feature worth incorporating into the Indian legislations. This will not only do away with the difficulty of defining a nebulous concept like a corridor, it will ensure that conservation schemes (such as the MoEF's protection of wildlife outside protected areas) work towards results rather than merely following procedures with no definite objectives or goals.
3. In India, there is an urgent need to find equilibrium between development and preserving ecological biodiversity, legal reforms and awareness programs accompanied by change in attitude towards our surrounding environment could achieve this.
4. To control elephants from moving out of their habitat in search of food and consequently causing harm to human and farming *Parthenium genus*, popularly known as the American grass should be eliminated. Secondly, tracking devices should be used so that the tribal population can be alarmed of approaching animals. Thirdly, sterilization of elephants as a mode of controlling the elephant population. Finally, there is abundance of energy in the universe and if properly utilized there will be no dearth of energy and hence the biodiversity can be very well preserved. For that, the Law of Time should be applied.
5. The Ad Hoc Open ended informal Working group established by the UN General Assembly to address the various limitations related to Marine Biodiversity Beyond Areas of National Jurisdiction (BBNJ) agreed on a 'package' of issues. Though far from complete, the process of addressing the legal and implementation gaps regarding the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction has come a long way. The importance of biological diversity beyond areas of national jurisdiction has been highlighted, the need for addressing the issues has been accepted, and the nature of possible future agreement has been deliberated. What now remains to be seen is how countries collaborate and resolve their differences in order to protect and conserve marine biodiversity in the Marine Areas Beyond National Jurisdiction (ABNJ), which is perhaps the last untouched bastion of marine biodiversity.



6. For the protection of Gangetic Dolphin population and conservation of the river Ganga biodiversity before it declines irreversibly, firstly, the number of River Dolphin sanctuaries should increase and the Dolphin Sanctuaries which exist demand stricter compliance of the Section 18 of Wild Life Protection Act. For this purpose even tourism activities should also be regulated by prohibiting certain particular activities such as boating as frequent boating may cause heavy traffic in the critical areas which may result in habitat restriction, noise pollution, accidental collision, depletion of prey base. Passage of Cargo streamers and Heavy vessels should be restricted in the notified areas. Secondly, some more ecological sensitive zones should also be declared that exist on land within the 10 kms of the identified stretches so that industries are not established within the 10 kms of the eco sensitive zones. Also, agricultural activities shall also be prohibited within the zone as voluminous pesticides are discharged in river from the agricultural fields.
7. Law makers and policy planners have to ensure that women are not simply 'added' to the conservation programme but rather that biodiversity itself is defined in broader, more inclusive and fluid terms incorporating diverse gendered experiences of different groups.
8. The recommendations and the amendments suggested by the Xaxa Committee should be austere adopted by the Government of India in framing of law and policies of indigenous people for the discussion on the Conservation of Bio Diversity is incomplete without protection of the rights of the indigenous people. These are the people who are more close to nature in comparison to any other group of people all over the world and hence they play important role in the protection of the Bio Diversity.
9. Numbers exist to measure the progress but the principle shows the way and unless energy justice is explicitly made the goal of all energy related policy, the poor, voiceless, out of sight and hence out of mind will continue to languish in oblivion. It is not to say that no progress has been made so far. Indeed, much has been achieved but more still needs to be achieved and it is for this future path yet to be taken that Redistributive Energy Justice must become the pivot around which all decisions revolve. Redistributive Energy Justice maybe attained through "energy trilemma" and its three goals – Energy security, Cost Effective Energy and Sustainable Use of Energy.
10. The loss of biodiversity in Sundarban can be materialized firstly by managing alternative employment opportunities of those whose livelihood rests on Sundarban and by developing sustainable management procedure which will replenish the loss of



resources for the local livelihood sustenance. Secondly, both legal and illegal all sorts of human interference act as hindrance to natural system of the forest, thus even unprescribe research may lead disturbance of flora and fauna normal life cause hamper biodiversity. All such activities should be limited. Finally, long term and short term forest management measures should be taken to make the forest sustain.

11. Since climate change, loss of biological diversity is directly related to food security there is a need to use bio-fuel, renewable resources to reduce emission of carbon dioxide gas. Food security directly and indirectly effects the availability of different biological diversity. People, government, judiciary should work to mitigate climate change and provide food to all.
12. The Jhum cultivation is a major contribution to the loss of biodiversity in the North Eastern region of India. However, it is an integral part of the culture and tradition of the region and because of which it cannot be banned or curbed. Some States in the region has enacted laws on Juhm cultivation by legalising it. The solution is that it should be regulated and used in a more productive way for the conservation of biodiversity.
13. The barriers in achieving a Global Environmental Organization are many folds. There is a general sense of unease among proponents of free trade in accepting environment as a trade barrier. However, these concerns are not well founded and interaction between a centralized environmental organization and other issue- specific international organizations will result into fewer conflicts.
14. To further the aims of Convention on Biological Diversity (CBD) in 1992 there is a need for incorporation of some compulsory provisions under the Agreement on Trade-Related Aspect of Intellectual Property (TRIPS Agreement) which all member States would be mandated to comply with and the amendment to TRIPS should incorporate three disclosure requirements: (a) disclosure of source and country of origin of biological material; (b) disclosure of evidence of prior informed consent; (c) disclosure of an evidence of a benefit sharing agreement.
15. There are disparities and inconsistencies between the international conservation regime and domestic conservation concepts. An international law to be enforceable in the Indian domestic legal system needs a corresponding domestic legislation. To get desired conservation results, the species should get concurrent protection at international, regional and national levels. The cases of the five species (bustards (and floricans), dolphin, marine turtles, dugongs, Indian rhinoceros) for which recovery programmes are



implemented by MoEF&CC, and Great Indian Bustard (GIB) could indicate the need for India to take an initiative and leadership in various international conventions pertaining to conservation and protection of wildlife and natural resources.

16. Conservation mechanisms for migratory species should ensure equity by structuring the overall conservation schemes in such a way that related factors like the right of the societies concerned and the extent of restrictions on the sovereignty of Member States are addressed. This gains relevance in the Indian context, especially, while considering the conservation issues regarding certain threatened migratory species such as the Tibetan antelope (which is killed in China to extract wool processed, woven and traded exclusively in India), Bengal tigers, Asian elephants, the Amur falcons (which is hunted in thousands in tribal areas within the Indian Territory, during its travel from East Asia to Africa), etc. India, with its tremendous biological diversity and political clout, has the capacity to lead other States, especially in Asia, towards an effective regional conservation regime compatible to CMS system.
17. India is now on the verge of new form of colonial occupation for a second time. This time however, by a multitude of MNCs trying to plunder its resources again. To prevent this exploitation which maybe more draconian than the British rule, India should gather all its resources to champion the cause of TK, Biodiversity, farmers' and indigenous and local communities' rights. It should also look at forging relationships and forming alliances similar to the Like Minded Megadiverse Countries (LMMC) to pack a punch to its voice at appropriate international forums and platforms.
18. The increase in population results in the demand for more energy, which ultimately increases energy trade. It affects environment as well as the biodiversity. There is no international energy law as such to regulate energy trade and the WTO rules are applicable to trade in energy goods and services. Thus, at present there is an imperative need to adopt some policy framework towards the regulation of energy trade.
19. In Compulsory licensing mechanism, there are lot of limitations and there it may not be a very feasible one as it poses an unattainable standard. Therefore, licensing framework, as a policy balance needs to be supplemented by other incentives by developed countries for their organizations to transfer technologies to developing countries. This may be in the form of patent pooling or product development partnership between organizations in developing countries and potential sources of technologies.



20. There is need to focus on building more and more frameworks for mutually beneficial economic arrangements between developed and developing countries to encourage innovation and transfer of technology to address climate change. The consideration of various measures related to IP should consider all opportunities within climate negotiations and not be limited to TRIPS Agreement.
21. The *Urgenda* decision could be imported to the Indian scenario because firstly, in India the principle of *locus standi* is highly relaxed and widened. Secondly, the doctrine of separation of powers has no strict position in the Indian Constitution and finally, the precautionary principle is well established in the Indian legal system, which is the same principle incorporated into the understanding of the climate change mitigation in the *Urgenda* case.
22. In the bio-diverse countries such as India, Brazil, and South Africa there is need to review their domestic laws and policies by these countries for coherent, clear and certain rules, procedures and institutions in time of contemporary development. Additionally, they also require to strengthen their purpose through cultural integration, institutional effectiveness, public participation and cooperative governance in their national and regional sphere. For that, there is also a need for strong commitment and cooperation through regional diplomacy and strategic partnership to promote the agenda of mutual concerns such as biodiversity conservation, environmental protection and climate change.
23. In protecting the green cover in India appropriate legislation should be undertaken, supported by adequate infrastructure, at the Centre and State levels in order to implement the Policy effectively. Thus, unless there is requisite manpower, equipment and adherence to well laid down protocols/ procedures of forest protection, there can be no effective “protection” as mandated by the scheduled Enactments of the NGT Act. All steps that need to be taken to further the cause of “protection” are ancillary and incidental to the mandate of the enactments.
24. The more we use, the more we take away from our progeny, to an extent that there might not be enough for a few generations down the line. Like human beings have a level to which they can manage toxins in their bodies, Nature also has a similar process; the hydrological cycle is but a mere example of self renewal. But like humans, Nature also has a saturation limit, so when we keep polluting the air more and more it essentially loses the ability to re-vitalize itself. Civilization as we know it should not reach a point where Civilization itself becomes a trap.



25. Since multi-purpose water projects are reasons for most of the water-related conflicts between India and its neighbors, particularly Teesta River, there is a need to establish cooperation over such projects or to promote demand-side management of water to manage the bilateral water conflicts. Allegations against the upper riparian for 'water theft', causing floods or droughts in lower riparian etc. are quite usual. Though the upper riparian state may not have an intention to regulate water of lower riparian states, the state-centric theories guide the former to do so in its 'interest' for 'security' or due to 'being a rational actor'. There is a need for holistic approach towards river water management and involvement of technical expertise, etc.
26. For the improvement of the environment, it is mandatory to inculcate environmental ethics in our day to day life towards the nature. Man takes a lot of things from the nature, thus it becomes a moral duty also to improve our behaviour towards the environment. It is a social, legal as well as moral obligation on us to save mother earth. There should be a mass awakening about the deteriorating environment. A wide spread of knowledge is mandatory in this regard. Through mass media, student programmes, plays, publications etc mass awakening can be speeded. The importance of the environment is to be taught.
27. Considering the rich biodiversity and biological resources available in the country, India should make use of the Nagoya Protocol to convert this instrument as a tool of opportunity to help local communities and conservation efforts. The Biological Diversity Act, 2002 (BD Act) already provides a solid base for implementation of the Nagoya Protocol. The BD Act needs to be finetuned to incorporate compliance measures, checkpoints and involvement of local communities in the access and benefit sharing (ABS) process in a big way.
28. India should also consider strengthening its institutional capacities with regard to access and benefit sharing (ABS), focusing on capacity building, training, conducting awareness programs for the stakeholders including indigenous communities and develop education materials for ensuring better implementation of the ABS laws in the country. The ABS Agreements should significantly balance the interests of the providers and users with the objective of conservation and sustainable use of biodiversity as guiding principles.
29. Like other countries, India can think of having a *sui generis* system for the adequate protection of the traditional cultural heritage. India, being a land of rich cultural heritage and traditional methods to cure maladies, has to go a way ahead in protecting the traditional knowledge. There is a need to take a holistic view of the entire intellectual



property system which provides equity to the creator of knowledge, whether created in laboratory of bricks or laboratory of life. It is very important to maintain a balance between protecting the rights of indigenous communities and the benefits arising out of commercialization of developments based upon this ancient treasure to bring about the socio-economic harmony and justice to all.

30. Issues relating to protection of Traditional Knowledge (TK) are very wide; a single solution can hardly be expected to meet such a wide range of concerns and objectives. Efforts should be taken for the protection of TK as many of indigenous communities depend on TK for their survival. The existing forms of intellectual property or a combination of various forms of intellectual property can be used to protect traditional knowledge till the development of a comprehensive *sui generis* legislative regime.
31. In Nigeria, the progressive encroachment on and loss of wetlands needs to be stopped, and measures must be taken to conserve and make wise use of wetland resources. To achieve this at a national level, Nigeria must transmit the Ramsar Convention into its body of laws, put in place strong enforcement mechanism and address the factors that militate against for the conservation of biodiversity and protection of sustainable Lagos wetland.
32. The pro active role of judiciary in countering the challenges of bio diversity in India requires urgent attention. The initial step would be that courts interpret laws in the light of international conventions.



CULTURAL EVENT

On the evening of the second day of the International Conference, the Campus Law Centre (CLC) organised a *Qawwali* programme - a Sufi form of musical recital, in the Auditorium of the CLC.

Nizami brothers, a very popular band in India and abroad performed various *Qawwalis* with the message of oneness and unity. The entire auditorium was jam-packed and the audience was spellbound by the performance of the *Qawwals* (performers). The recitals conveyed the message of brotherhood, love, peace, co-existence, goodwill and unity in the beautifully crafted music. The *Qawwals* also recited certain Bollywood *Qawwalis* in originally crafted music.

The *Qawwals* were appreciated for their marvellous performances by Indian as well as international delegates participating in the Conference.





LIST OF PARTICIPANTS

Mrs. Maneka Sanjay Gandhi
Hon'ble Union Cabinet Minister
Women and Child Development

Hon'ble Mr. Justice Uday U. Lalit
Judge, Supreme Court of India

Hon'ble Mr. Justice A.K. Patnaik
Former Judge, Supreme Court of India

Professor (Dr.) Koh Mun-Hyun
Soongsil University, Seoul, Republic of Korea

Professor (Dr.) Usha Tandon
Professor-in-Charge, CLC

Professor (Dr.) S.C. Raina
Professor, CLC

Professor (Dr.) Kamla Sankaran
Professor, CLC

Professor (Dr.) Rajiv Khanna
Director, Faculty of Law, SGT University, Gurgaon

Professor (Dr.) Indu Agnihotri
Director & Professor
Centre for Women's Development Studies

Mr. S.K. Gupta
Associate Professor, CLC

Professor (Dr.) Surender Kumar
Professor, Delhi School of Economics

Professor (Dr.) C. Raj Kumar
Vice Chancellor, O.P. Jindal Global University,
Haryana

Professor (Dr.) Afzal Wani
Professor & Dean, University School of Law and
Legal Studies, GGSIPU University, New Delhi

Ms. Neha
Assistant Professor, CLC

Ms. Anju Sinha
Assistant Professor, CLC

Ms. Harleen Kaur
Assistant Professor, CLC

Hon'ble Mr. Justice Ranjan Gogoi
Judge, Supreme Court of India

Mr. Mohan Parasaran
Senior Advocate, formerly Solicitor General of
India

Mr. Sidharth Luthra
Senior Advocate, formerly Additional Solicitor
General of India

Ms. Cheshta Dehiya
Assistant Professor, CLC

Professor (Dr.) B.T. Kaul
Chairperson, Delhi Judicial Academy

Mr. Sanjay Upadhyay
Advocate, Supreme Court of India
Honorary Managing Trustee – ELDF

Dr. Md. Moshir Rahman
Deputy Director, Bangladesh Public
Administration Training Centre (BPATC) Savar,
Dhaka, Bangladesh

Mr. Mayank Mittal
Assistant Professor, CLC

Ms. Namita Vashishta
Assistant Professor, CLC

Mr. Moatoshi Ao
Assistant Professor, CLC

Mr. Neeraj Gupta
Assistant Professor, CLC

Mr. Neeraj Kumar
Assistant Professor, CLC

Dr. Pranab Pal, D.Phil.
Wildlife Institute of India, Chandrabani,
Dehradun, Uttarakhand

Dr. Hiran Das Mahar
Assistant Professor, Dept. of Botany, Govt. RG
PG Autonomous College Ambikapur Surguja,
Chhattisgarh, India

Kapil Narula
Cdr (Indian Navy), Research Fellow, National



Maritime Foundation Airport Road, New Delhi

Mr. Shourie Anand Singh

Assistant Professor, CLC

Mr. Akash Anand

Assistant Professor, CLC

Dr. Shashi Bala

Assistant Professor, CLC

Dr. Huma Khan

Assistant Professor, CLC

Ms. Sanjivini, Raina

Assistant Professor, CLC

Niharika Bahl

Independent Law Researcher and Guest Faculty,
Campus Law Centre, University of Delhi, Delhi

Trinadh Kumar Potina

Student, Campus Law Centre, University of Delhi,
Delhi

Richa Tyagi

Programme Officer, Research and Partnerships
Centre for Environmental Law WWF-India, New
Delhi

Mr. Santosh Kumar

Assistant Professor, CLC

Mr. Parikshet Sirohi

Assistant Professor, CLC

Ms. Shilpi

Assistant Professor, CLC

Ms. Apanjot Kaur

Assistant Professor, CLC

Mr. Manjesh Rana

Assistant Professor, CLC

Mr. Jamshed Khan

Assistant Professor, CLC

Raghav Srivastava

Programme Officer, Research and Partnerships
Centre for Environmental Law WWF-India, New
Delhi

Mukta Verma

Assistant Professor, Faculty of Law, University of
Allahabad, Uttar Pradesh

Madhu Bhatti

Assistant Professor, Law Centre-II
Faculty of Law, University of Delhi, Delhi

Ikshita Singh

Student, Campus Law Centre, University of
Delhi, Delhi

Mr. Satendra

Student, CLC

Mr. Vinod Chauhan

Assistant Professor, CLC

Mr. Dinesh Singh

Assistant Professor, CLC

Mr. Mizum Nyodu

Assistant Professor, CLC

Mr. Rahul Kumar

Assistant Professor, CLC

Ms. Niharika Bahl

Assistant Professor, CLC

Sahil Ghei

Student, Campus Law Centre, University of
Delhi, Delhi

Nidhi Nagpal

Student, Campus Law Centre, University of
Delhi, Delhi

Dr. Niraj Kumar

Assistant Professor, National Law University
Delhi, Delhi

Ms. Isha

Assistant Professor, CLC

Ms. Sunita Kumar

Assistant Professor, CLC

Mr. Gauraan

Assistant Professor, CLC

Mr. Sunil Kumar

Assistant Professor, CLC

Mr. Tarun Narang

Student, CLC

Ms. Priya Rastogi

Student, CLC

**Dr. Vandana Mahalwar**

Assistant Professor, Indian Law Institute
New Delhi

Dr. Shabnam

Assistant Professor, LC-II, Faculty of Law,
University of Delhi, Delhi

Dr. Kavitha Chalakkal

Assistant Professor, Amity Law School Delhi,
Guru Gobind Singh Indraprastha University,
Delhi

Ms. Sadaf Ansari

Student, CLC

Mr. Nakul

Student, CLC

Ms. Shalini

Student, CLC

Mr. Raman Kaushik

Student, CLC

Ms. Chetanya Sharama

Student, CLC

Shruti Gulia

Student, Campus Law Centre, University of
Delhi, Delhi

Chandralekha.v.

Assistant Professor, SDM Law College
Mangalore, Karnataka

Maansi Verma

LAMP Fellow, PRS Legislative Research, New
Delhi

Nikita Pattajoshi

Research Scholar, The West Bengal National
University of Juridical Sciences (NUJS),
Kolkata, West Bengal

Shreeyash Uday Lalit

Student, Campus Law Centre, University of
Delhi, Delhi

Ms. Bhawna

Student, CLC

Ms. Garima

Student, CLC

Ms. Shalini

Student, CLC

Ms. Priya

Student, CLC

Ms. Parima

Student, CLC

Mr. Shrishthi Jha

Student, CLC

Sana Naseem

Student, Faculty of Law, Aligarh Muslim
University, Aligarh, Uttar Pradesh

Amrendra Kumar

Research Scholar, Centre for International Legal
Studies, School of International Legal Studies,
Jawaharlal Nehru University, New Delhi

Aditya Narayan Prasad

Advocate, Supreme Court of India and National
Green Tribunal, New Delhi

Dr. Shilpa Bagade

Assistant Professor, IMS Law College Noida,
Uttar Pradesh

Manjula Raghav

Assistant Professor, Amity Law School, Delhi

Mr. Sandeep Goel

Student, CLC

Mr. Raj Shekar

Student, CLC

Mr. Jatin Yadav

Student, CLC

Ms. Sanjoli

Student, CLC

Mr. Lalit Kumar

Student, CLC

Dr. Poonam Verma

Assistant Professor, CLC

Dr. Pushpa Kumar Lakshmanan

Associate Professor, The School of Ecology and
Environment Studies, Nalanda University, Bihar

**Dr. Neeru Nakra**

Associate Professor, Vivekananda Institute of Professional Studies affiliated to GGSIPU, Delhi

Sneha Jheethay

Student, Law College Dehradun, Uttarakhand University, Uttarakhand

Ahn Tae-yong

Research Scholar, College of Law Soongsil University, South Korea

Dr. (Mrs.) Erimma Gloria Orie

Lecturer, National Open University of Nigeria, Nigeria

Dr. Stellina Jolly

Faculty of Legal Studies, South Asian University, New Delhi

Ritupriya Gurtoo

Assistant Professor at Department of Law, Prestige Institute of Management and Research, Indore, Madhya Pradesh

Ranidipa Ghosh

Research Scholar, University of Petroleum and Energy Studies, Dehradun, Uttarakhand

Mr. Jitender Kumar

Student, CLC

Mr. Abhishik

Student, CLC

Ms. Sangam Preet

Student, CLC



ORGANISING COMMITTEE

Director

Professor (Dr.) Usha Tandon

Professor-In-Charge, Campus Law Centre, University of Delhi

Joint-Directors

Professor (Dr.) S.C. Raina - Professor (Dr.) Kamla Sankaran

Secretariat

Dr. Alka Chawla, Associate Professor

Dr. Raman Mittal, Associate Professor

Mr. S.K. Gupta, Associate Professor

Dr. Vandana, Associate Professor

Dr. Gunjan Gupta, Associate Professor

Ms. Neha, Assistant Professor

Coordinators

Mr. Moatoshi Ao, Assistant Professor

Ms. Cheshta Dehiya, Assistant Professor

Mr. Akash Anand, Assistant Professor

Mr. Aash Mohammad, Assistant Professor

Members

Mr. Neeraj Kumar, Assistant Professor

Mr. Akash Anand, Assistant Professor

Mr. Neeraj Gupta, Assistant Professor



CONFERENCE SUB-COMMITTEES

i. Welcome Committee

Ms. Isha, Assistant Professor
Ms. Cheshta Dehiya, Assistant Professor
Mr. Mizum Nyodu, Assistant Professor
Mr. Parikshet Sirohi, Assistant Professor

ii. Registration Committee

Dr. Shashi Bala, Assistant Professor
Dr. Huma Khan, Assistant Professor
Ms. Sanjivini Raina, Assistant Professor
Mr. Namit Srivastva, Assistant Professor

iii. Hospitality Committee

Ms. Harleen Kaur, Assistant Professor
Ms. Shilpi, Assistant Professor
Mr. Sunita, Assistant Professor
Ms. Apanjot Kaur, Assistant Professor

iv. Felicitation and Stage Coordination Committee

Mr. Manjesh Rana, Assistant Professor
Mr. Jamshed Khan, Assistant Professor
Mr. Dinesh Singh, Assistant Professor
Ms. Ajeet Singh, Assistant Professor

v. Decoration Committee

Ms. Anju Sinha, Assistant Professor
Mr. Manjesh Rana, Assistant Professor
Mr. Dinesh Singh, Assistant Professor



- vi. Catering Committee**
Ms Monica Chaudhary, Assistant Professor
Dr. Poonam Verma, Assistant Professor
Ms. Namita Vashishta, Assistant Professor
Mr. Vinod, Assistant Professor
Ms Cheshta Dahiya, Assistant Professor
- vii. Accommodation Committee**
Mr. Manjesh Rana, Assistant Professor
Mr. Neeraj Kumar, Assistant Professor
Mr. Rahul Kumar, Assistant Professor
Mr. Sunil Kumar, Assistant Professor
- viii. Media & Advertisement Committee**
Mr. Shourie Anand Singh, Assistant Professor
Mr. Akash Anand, Assistant Professor
Mr. Mohib, Assistant Professor
Mr. Tarun Narang, Student Convener
- ix. Sponsorship Committee**
Mr. Vinod Kumar, Assistant Professor
Mr. Neeraj Kumar, Assistant Professor
Mr. Aash Mohammad, Assistant Professor
- x. Cultural Event**
Mr. Vinod Chauhan, Assistant Professor
Ms. Miyum Nyodu, Assistant Professor
Ms. Cheshta Dahiya, Assistant Professor
- xi. Souvenir Committee**
Professor (Dr.) Usha Tandon, Professor
Mr. Maotoshi Ao, Assistant Professor
Ms. Cheshta Dehiya, Assistant Professor
Mr. Akash Anand, Assistant Professor
Mr. Neeraj Gupta, Assistant Professor



PROGRAMME DETAILS

Inaugural Session

Friday, 12th February, 2016

Time 10:00 – 11:00 a.m.

Venue: Auditorium, CLC, DU

10:00 a.m. – 10:05 a.m.	Lighting of Lamp and Felicitation of Guests
10:05 a.m. – 10:15 a.m.	Welcome Address and Introductory Remarks Professor (Dr.) Usha Tandon Professor-In-Charge, CLC and Conference Director
10:15 a.m. – 10:25 a.m.	Address by Guest of Honour Professor (Dr.) Koh Mun-Hyun Soongsil University, Seoul, Republic of Korea
10:25 a.m. – 10:40 a.m.	Address by Special Guest of Honour Hon'ble Mr. Justice A.K. Patnaik Former Judge, Supreme Court of India
10:40 a.m. – 10:55 a.m.	Inaugural Address by Chief Guest Mrs. Maneka Sanjay Gandhi Hon'ble Union Cabinet Minister, Women and Child Development Former, Minister of Environment and Forest
10:55 a.m. – 11:00 a.m.	Vote of Thanks by Professor (Dr.) Kamla Sankaran Professor, CLC
11.00 a.m. - 11.30 a.m.	High Tea



VALEDICTORY SESSION

Sunday, 14th February, 2016

Time 4.00 - 5.30 P.M.

Venue: Auditorium, CLC, DU

4:00 p.m. – 4:05 p.m.	Felicitation of Guests
4:05 p.m. – 4:15 p.m.	Welcome Address and Closing Remarks Professor (Dr.) Usha Tandon Professor-In-Charge, CLC and Conference Director
4:15 p.m. – 4:25 p.m.	Address by Guest of Honour Mr. Sidharth Luthra Senior Advocate, formerly Additional Solicitor General of India
4:25 p.m. – 4:35 p.m.	Address by Guest of Honour Mr. Mohan Parasaran Senior Advocate, formerly Solicitor General of India
4:35 p.m. – 4:50 p.m.	Address by Special Guest of Honour Hon'ble Mr. Justice Uday U. Lalit Judge, Supreme Court of India
4:50 p.m. – 5:10 p.m.	Valedictory Address by Chief Guest Hon'ble Mr. Justice Ranjan Gogoi Judge, Supreme Court of India
5:10 p.m. – 5:25 p.m.	Distribution of Certificate
5.25 p.m. – 5:30 p.m.	Vote of Thanks Professor (Dr.) S.C. Raina Professor, CLC
5:30 pm. – 6:00 pm.	High Tea



Schedule of February 12th, 13th & 14th, 2016

<p>Day One Friday, February 12, 2016</p>	<p>08:30 a.m. – 10:00 a.m. Registration of Delegates 10:00 a.m. – 11:00 a.m. Inaugural Session 11:00 a.m. – 11:30 a.m. High Tea 11:30 a.m. – 01:00 p.m. Technical Session – I 01:00 p.m. – 02:00 p.m. Lunch Break 02:00 p.m. – 03:30 p.m. Technical Session – II 03:30 p.m. – 04:00 p.m. Teak Break 06:00 p.m. Boarding of Bus from CLC to Welcome Dinner Venue 07:00 p.m. – 08:30 p.m. Welcome Dinner</p> <p><i>Hosted by :</i> Mr. Mohan Parasaran Senior Advocate formerly Solicitor General of India</p> <p><i>Venue:</i> Magnolia Hall, India Habitat Centre, Lodhi Road, New Delhi-110003</p>
<p>Day Two Saturday, February 13, 2016</p>	<p>09:30 a.m. – 11:00 a.m. Technical Session – III 11:00 a.m. – 11:15 a.m. Tea Break 11:15 p.m. – 01:00 p.m. Technical Session – IV 01:00 p.m. – 02:00 p.m. Lunch 02:00 p.m. – 03:30 p.m. Technical Session – V 03:30 p.m. – 03:45 p.m. Tea Break 03:45 p.m. – 05:15 p.m. Technical Session – VI 05:15 p.m. – 05:30 p.m. Tea Break 05:30 p.m. – 06:30 p.m. Cultural Event Qawali by, Nizami Brothers Venue: CLC Auditorium</p>
<p>Day Three Sunday, February 14, 2016</p>	<p>09:30 a.m. – 11:15 a.m. Technical Session – VII 11:15 a.m. – 11:30 a.m. Tea Break 11:30 a.m. – 01:00 p.m. Technical Session – VIII 01:00 p.m. – 02:00 p.m. Lunch 02:00 p.m. – 04:00 p.m. Technical Session – IX 04:00 p.m. – 05:30 p.m. Valedictory Session 05:30 p.m. – 06:00 p.m. High Tea</p>



Glimpses of the Conference

Inaugural Session



Ms. Maneka Sanjay Gandhi and MHJ A.K. Patnaik lightening the lamp



*(L-R) Prof. Koh Mun-Hyun, Prof. Usha Tandon, Ms. Maneka Sanjay Gandhi
HMJ A.K. Patnaik, Prof. Kamala Sankaran*

Inaugural Session



Felicitation of Ms. Maneka Sanjay Gandhi



Felicitation of HMJ A.K. Patnaik



(L-R) Prof. Usha Tandon, Ms. Maneka Sanjay Gandhi

Inaugural Session



Felicitating of Prof. Koh-Mun-Hyun



Mrs. Maneka Sanjay Gandhi delivering the Inaugural Address



Ms. Maneka Sanjay Gandhi delivering the Inaugural Address

Inaugural Session



HMJ A.K. Patnaik at the Inaugural Session



Prof. Koh-Mun-Hyun at the Inaugural Session



Inaugural Session



Delegates



(L-R) Ms. Maneka Sanjay Gandhi and HMJ A.K. Patnaik

Guest of Honour

Professor (Dr.) Koh Mun-Hyun

Associate Professor, School of Chemistry, Seoul National University

Vote of Thanks

Professor (Dr.) Kamala Sankaran

Professor, CLC

Welcome Address, Introductory & Closing Remarks

Professor (Dr.) Usha Tandon

Professor-in-Charge, CLC & Conference Director

Mr. Mohan Parasaran

Senior Advisor, Research & Innovation of India

Mr. Sidharth Luthra

Senior Advisor, formerly Additional Secretary General of India

Vote of Thanks

Professor (Dr.) S.C. Raina

Professor, CLC

February 12th - 14th, 2016 Venue: Auditorium & Seminar Hall, CLC, DU



Ms. Maneka Sanjay Gandhi and HMJ A.K. Patnaik (in the centre) with CLC faculty



Mrs. Maneka Sanjay Gandhi



Justice A.K. Patnaik



Welcome Dinner



(L-R) Prof. Koh Mun-Hyun, Mr. Mohan Parasaran



Delegates at India Habitat Centre during Welcome Dinner



Welcome Dinner



Delegates





Welcome Dinner



Delegates



(L-R) Mr. Mohan Parasaran, Prof. Afzal Wani

LLS LAW CENTRE
University of Delhi, Delhi

Welcome Dinner, hosted by

MR. MOHAN PARASARAN

Senior Advocate, formerly Solicitor General of India

For
International Centre
on

Constitution of India
Sustainable Energy



Mr. Mohan Parasaran (Third from Left) with delegates



CAMPUS LAW CENTRE

University of Delhi, Delhi

Welcome Dinner, hosted by

MR. MOHAN PARASARAN

Senior Advocate, formerly Solicitor General of India



Mr. Mohan Parasaran (in the centre) with delegates



Welcome Dinner



Mr. Mohan Parasaran, Prof. Usha Tandon



Student Volunteers



Welcome Dinner



Delegates



CAMPUS LAW CENTRE

University of Delhi, Delhi

Welcome Dinner, hosted by

MR. MOHAN PARASARAN

Senior Advocate, formerly Solicitor General of India

For International
Law and Justice

Centre of Biotechnology and
Law



Delegates at Welcome Dinner



CAMPUS LAW CENTRE

University of Delhi, Delhi

Welcome Dinner, hosted by

MR. MOHAN PARASARAN

Senior Advocate, formerly Solicitor General of India

International Conference

Conservation and Sustainable Development



Mr. Mohan Parasaran (in the centre) with distinguished guests



Welcome Dinner

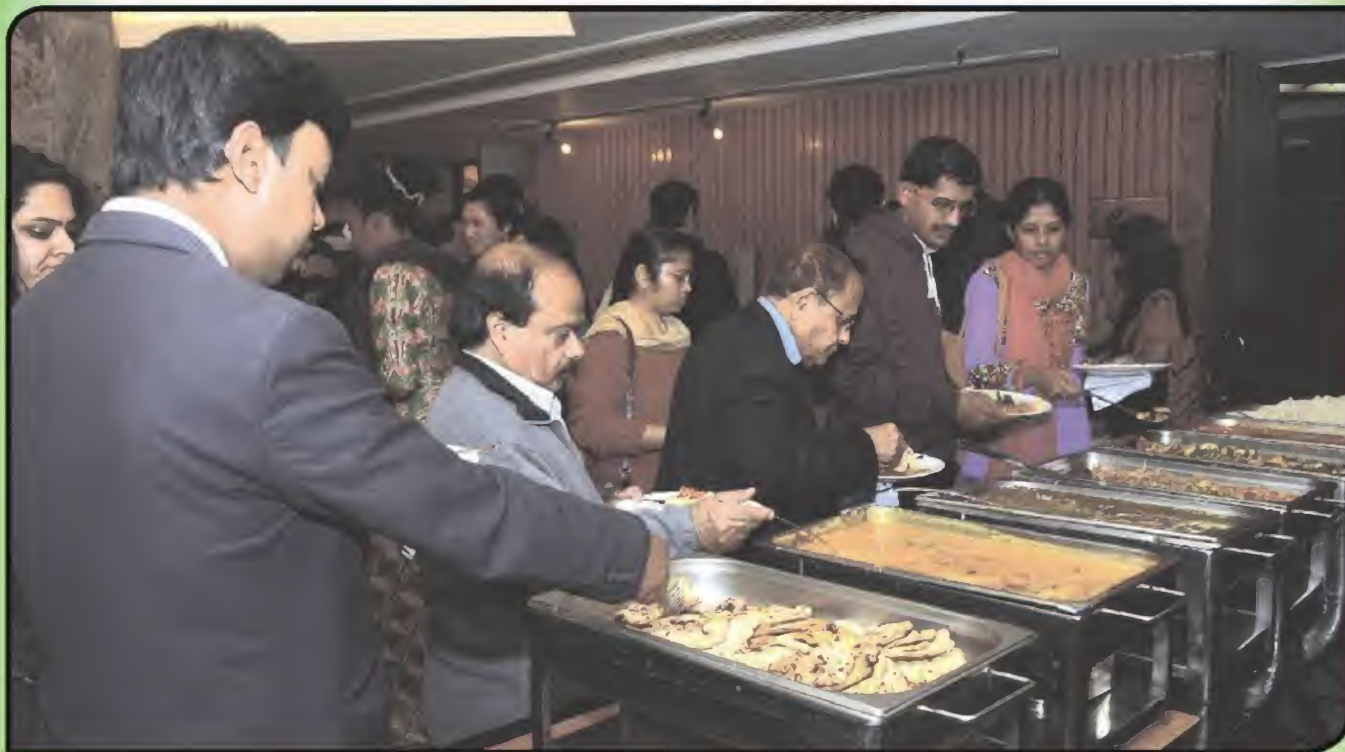


Enjoying food at India Habitat Centre hosted by Mr. Mohan Parasaran





Welcome Dinner



Enjoying food at India Habitat Centre hosted by Mr. Mohan Parasaran





Welcome Dinner



Enjoying food at India Habitat Centre hosted by Mr. Mohan Parasaran





Technical Session



Prof. S.C. Raina Chairing the session





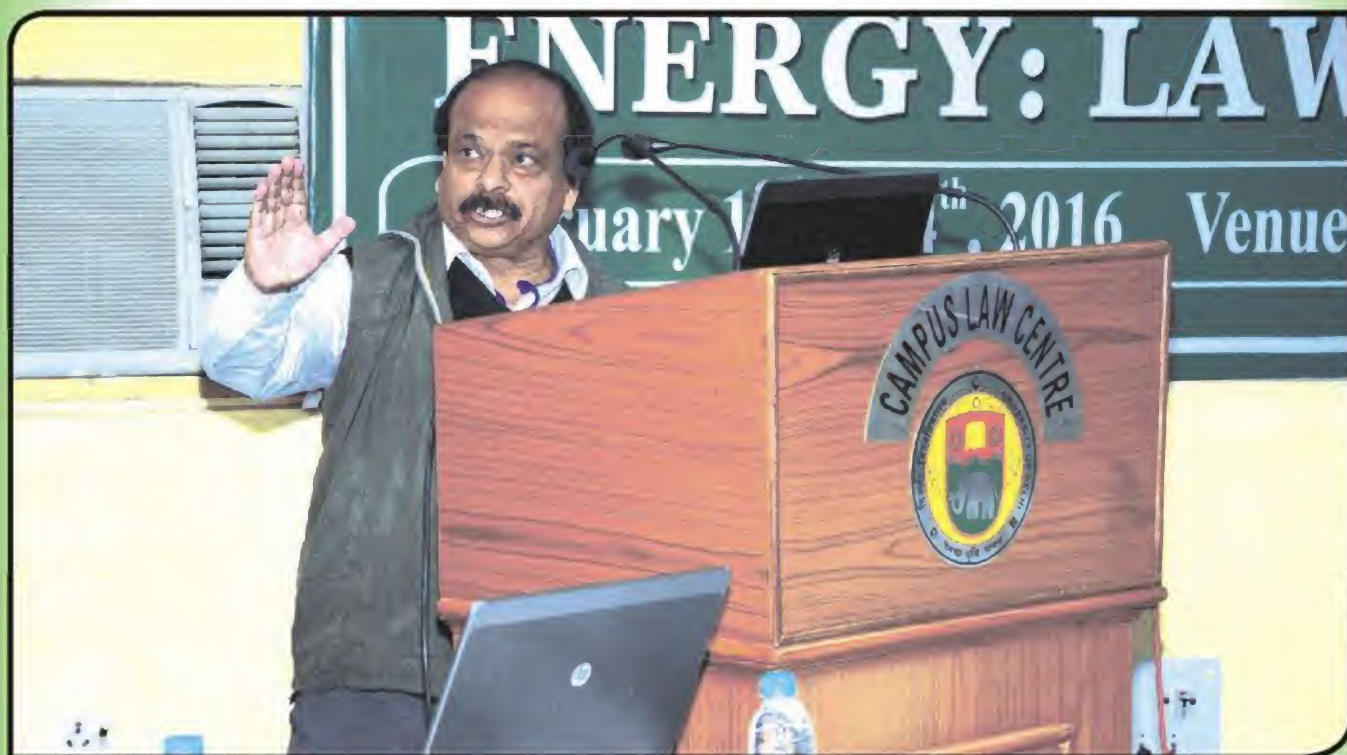
Technical Session



Delegates



Technical Session



Delegates making presentations





Technical Session



Interactive Session



Prof. Usha Tandon in the Interactive Session



Technical Session



Dr. Erimma in the Interactive Session



Delegates



Technical Session



Delegates



Prof. Rajiv Khanna

Technical Session



Felicitation of Prof. Rajiv Khanna



Prof. Rajiv Khanna chairing the Session



Technical Session



Student Rapporteurs



Delegate making presentation



Technical Session



Interactive Session



Delegate making presentation



Technical Session



Interactive Session





Technical Session



Delegates



Felicitation of Prof. Indu Agnihotri



Technical Session



Prof. Indu Agnihotri chairing the Session





Technical Session



Student Rapporteurs



Delegate making presentation



Technical Session



Delegate





Technical Session



Delegate making presentation



Interactive Session



Technical Session



Felicitatation of Prof. Surender Kumar



Prof. Surender Kumar chairing the Session



Technical Session



Delegate making presentation



Delegate making presentation



Technical Session



Delegate making presentation



Interactive Session



Technical Session



Interactive Session



Felicitation of Professor (Dr.) Afzal Wani



Technical Session



Ms. Anju Sinha introducing Professor (Dr. Afzal Wani)



Professor (Dr.) Afzal Wani chairing the Session



Technical Session



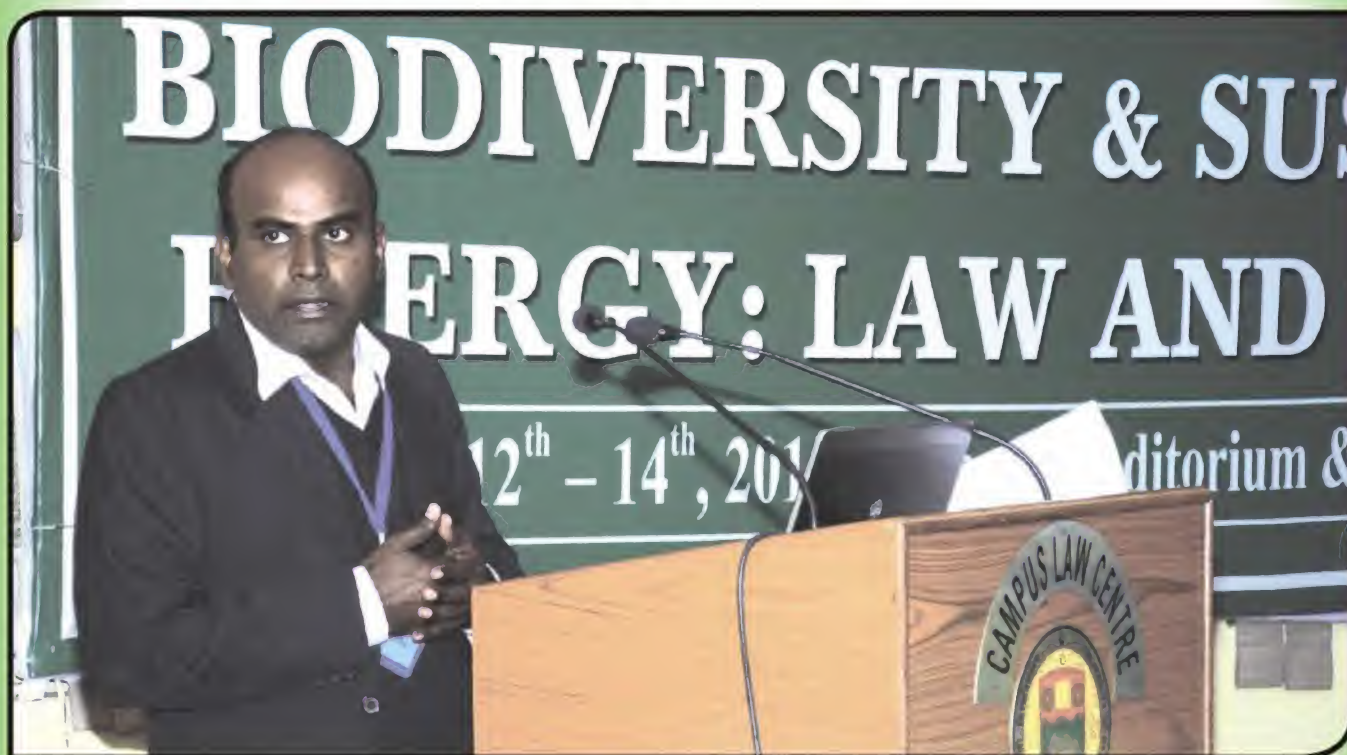
Prof. Afzal Wani chairing the Session



Delegate making presentation



Technical Session



Delegate making presentation



Professor B.T. Kaul chairing the Session



Technical Session



Felicitation of Professor (Dr.) B.T. Kaul



Delegates



Technical Session



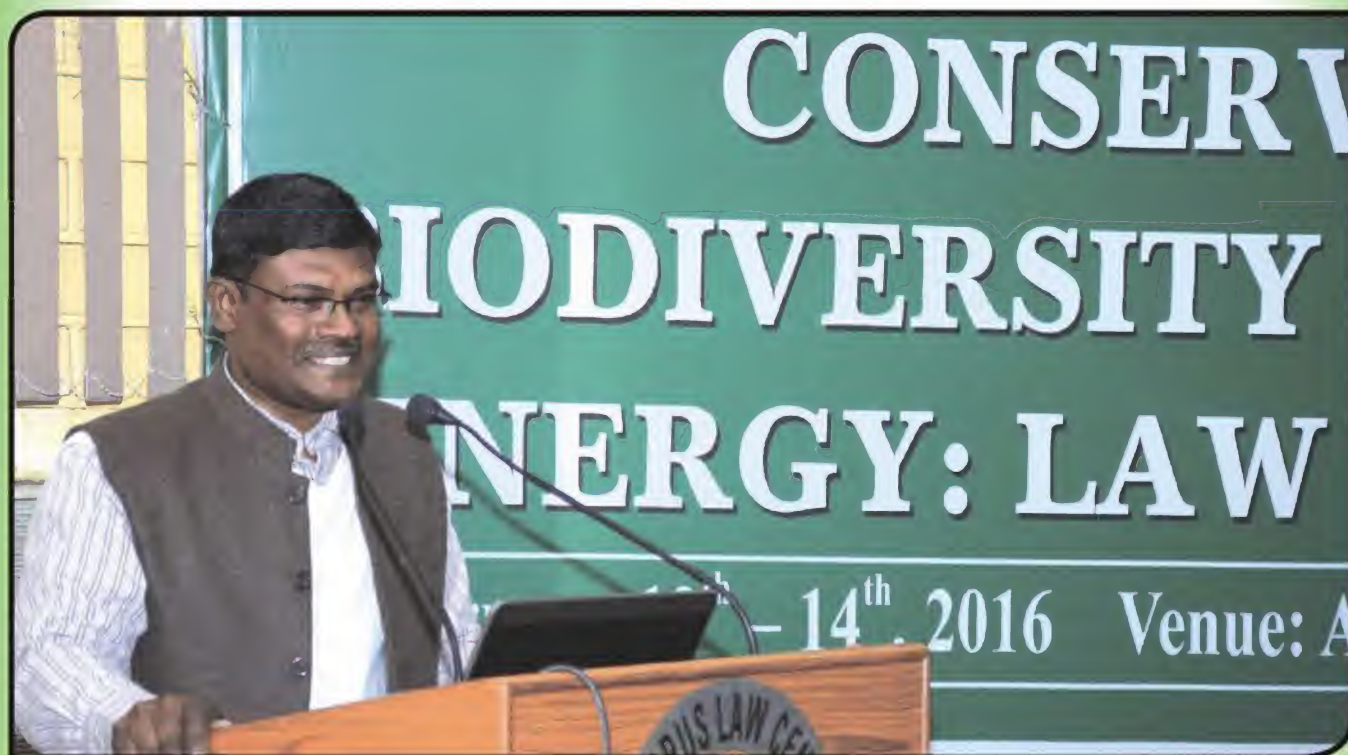
Delegates making presentation



Delegates



Technical Session



Delegate making presentation



Interactive Session



Technical Session



Delegate making presentation



Interactive Session



Technical Session



Prof. Usha Tandon chairing the Session





Technical Session



Student Rapporteurs



Interactive Session



Technical Session



Delegates making the presentation





Technical Session



Interactive Session





Technical Session



Delegate making the presentation



Interactive Session



Technical Session



Prof. C. Raj Kumar chairing the Session



Interactive Session

Technical Session



Felicitation of Prof. C. Raj Kumar



Mr. Akash Anand introducing the chairperson



Technical Session



Prof. C. Raj Kumar chairing the Session



Delegate making the presentation



Technical Session



Delegate making the presentation





Technical Session



Delegates





Technical Session



Interactive Session





Technical Session



Delegates





Technical Session



Mr. Sanjay Upadhyay chairing the Session



Delegates



Technical Session



Felicitation of Mr. Sanjay Upadhyay



Mr. Sanjay Upadhyay chairing the Session



Technical Session



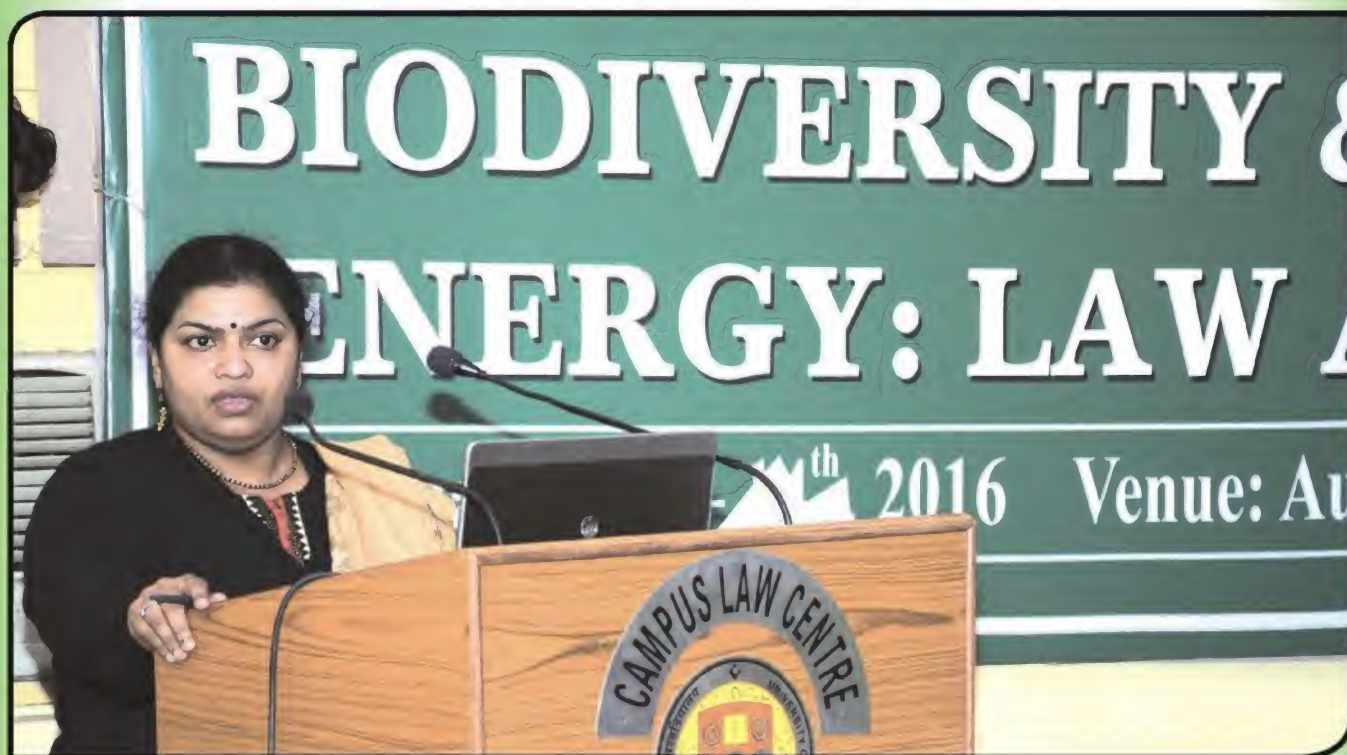
Delegate making presentation



(L-R) Prof. B.T. Kaul, Prof. Usha Tandon attending the Technical Session



Technical Session



Delegates making presentation





Technical Session



Delegates making presentation





Technical Session



Delegates





Technical Session



Delegate



Delegate making presentation



Technical Session



Delegates



Delegates



Technical Session



Delegate making the presentation



Delegate



Technical Session



Delegates



Delegate making presentation



Technical Session



Delegates making presentation





Technical Session



Interactive Session



Delegates



Technical Session



Delegates making presentation





Technical Session



Interactive Session





Technical Session



Interactive Session





Prof. Usha Tandon, Prof. Raj Kumar (in the centre) with CLC faculty

Cultural Events



Qualli by Nizami Brothers





Cultural Events



Audience





Cultural Events



Audience



Valedictory Session



Felicitation of HMJ Ranjan Gogoi

[illegible]

Inaugural Address
Deeka Sanjay Gandhi
Child Development

Meika Dary
Minister, Women and Child Development
Minister of Environment and Forest

Special Guest of Honour
Justice A. K. Pawar
Supreme Court of India

t of Honour

Koh M.
Seoul

Address

Charge, C
nce Direct

Felicitation of HMJ Uday U Lalit

CONSERVATION OF BIO

Inaugural Address

Mrs. Maneka Sanjay Gandhi
Hon'ble Union Cabinet Minister, Women and Child Development
Former, Minister of Environment and Forest

Special Guest of Honour

Hon'ble Justice A. K. Patil
Judge, Supreme Court of India

Guest of Honour

Kohli
ul, Re



Felicitation of Mr. Mohan Parasaran

ENERGY: LAW AND PRACTICE

Valedictory Address

Hon'ble Mr. Justice Ranjan Go
Judge, Supreme Court of India

Special Guest of Honour

Justice Uday U. Lalit
Supreme Court of India

Guests of Honour

Mr. Sidhar

Felicitatation of Mr. Sidharth Luthra





SUSTAINABLE E

Hon'ble

Hon'ble

Sanjay Gandhi

Special C

Mr. J

Former Judge

fess

Soor

rofes

Valedictory Session



HMJ Ranjan Gogoi delivering Valedictory Address



HMJ Uday U Lalit Special Address

CONSERVATION OF BIODIVERSITY & SUSTAINABLE DEVELOPMENT International Conference

Inaugural Address

Mrs. Jyoti Basu
Hon'ble

Indira Sanjay Gandhi

Minister, Women and Child Development
Minister of Environment and Forest

Special Guest of Honour

Justice A. K. Patnaik

Justice, Supreme Court of India



HMJ Uday U Lalit



Mr. Mohan Parasaran



Valedictory Session



Mr. Mohan Parasaran at Valedictory Session



Audience



International Conference on BIODIVERSITY & SUSTAINABLE ENERGY: LAW

Hon'ble Mr. Justice P. Patnaik

Inaugural Address

Aneka Sanja

Minister, Women

Minister of Environment

Special Guest of

Mr. Justice

Former Judge

Dr C

ngsit U



Valedictory Session



Distribution of certificates by HMJ Ranjan Gogoi and HMJ U.U. Lalit



Valedictory Session



Distribution of certificates by H.M.J. Ranjan Gogoi and H.M.J. U.U. Lalit





HMJ Ranjan Gogoi



Valedictory Session



Distribution of certificates by HMJ Ranjan Gogoi and HMJ U.U. Lalit





HMJ Uday U Lalit

Valedictory Session



Distribution of certificates by H.M.J. Ranjan Gogoi and H.M.J. U.U. Lalit





Mr. Sidharth Luthra

Valedictory Session



Distribution of Certificates



Prof. (Dr.) Usha Tandon at the Valedictory Function



Valedictory Session



Prof.(Dr.) S.C. Raina at Valedictory Session



CAMPUS LAW CENTRE, DU
International Conference on
CONSERVATION OF BIODIVERSITY & SUSTAINABLE ENERGY: LAW AND PRACTICE

Invited Address
Mrs. Maneka Sanjay Gandhi
 Hon'ble Union Cabinet Minister, Women and Child Development
 Former Minister of Environment and Forest

Special Guest of Honour
Hon'ble Mr. Justice A. K. Patnaik
 Former Judge, Supreme Court of India

Guest of Honour
Professor (Dr.) Koh Mun-Hyun
 Former Minister, Republic of Korea
 Professor (Dr.) Ramnada Sankaran
 Former Minister, India

Validation Address
Hon'ble Mr. Justice Ranjan Gogoi
 Judge, Supreme Court of India

Special Guest of Honour
Hon'ble Mr. Justice Uday U. Lalit
 Judge, Supreme Court of India

Guest of Honour
Mr. Mohan Parasaran
 Former Minister, India
 Professor (Dr.) Uday Lalit, London
 President and Founder, CLC, DU

Save the Planet, Save the Future
Mr. Sidharth Luthra
 Advocate, Supreme Court of India
 Professor, (Dr.) A.C. Balra
 Former Judge

February 12th
Venue: Seminar & Conference Hall, CLC, DU



HMJ Ranjan Gogoi in the centre with HMJ Uday U. Lalit, Mr. Mohan Parasaran, Mr. Sidharth Luthra and other distinguish guest

International Conference on

CONSERVATION OF BIODIVERSITY & SUSTAINABLE ENERGY: LAW AND PRACTICE

Inaugural Address

Mrs. Maneka Sanjay Gandhi

Hon'ble Union Cabinet Minister, Women and Child Development
Former, Minister of Environment and Forest

Special Guest of Honour

Hon'ble Mr. Justice A. K. Patnaik

Former Judge, Supreme Court of India

Guest of Honour

Professor (Dr.) Koh Mun-Hyun

Yong of Thought
Professor (Dr.) Kumada
Professor, Yonsei University

Valdictory Address

Hon'ble Mr. Justice Ranjan Gogoi

Judge, Supreme Court of India

Special Guest of Honour

Hon'ble Mr. Justice Uday U. Lalit

Judge, Supreme Court of India

Guests of Honour

Mr. Mohan Parasaran

Secretary, Ministry of Environment and Forest

Mr. Sidharth Luthra

Secretary, Ministry of Environment and Forest

Professor (Dr.) Luthra

Professor, Delhi University

Mr. Mohan Parasaran

Secretary, Ministry of Environment and Forest

Professor (Dr.) Kumada

Professor, Yonsei University

HMJ Ranjan Gogoi, fifth from right with HMJ Uday U. Lalit, Mr. Mohan Parasaran, Mr. Sidharth Luthra and other distinguish guest

International Conference on CONSERVATION OF BIODIVERSITY & SUSTAINABLE ENERGY: LAW AND POLICY

Inaugural Address

Mrs. Maneka Sanjay Gandhi

Hon'ble Union Cabinet Minister, Women and Child Development
Former, Minister of Environment and Forest

Special Guest of Honour

Hon'ble Mr. Justice A. K. Patnaik

Former Judge, Supreme Court of India

Guest of Honour

Professor (Dr.) Koh Mun-Hyun

Sejong University, Seoul, Republic of Korea

Vote of Thanks

Professor (Dr.) Kamala Sankaran

Yokosue, CLC

Valedictory Address

Hon'ble Mr. Justice Ranjan G.

Judge, Supreme Court of India

Special Guest of Honour

Hon'ble Mr. Justice Uday U. L.

Judge, Supreme Court of India

Guests of Honour

Mr. Mohan Parasaran

Senior Advocate, formerly, Supreme Court of India

Mr. Sidhar

Senior Advocate, formerly, Supreme Court of India

Welcome Address, Introductions & Opening Remarks

Professor (Dr.) Usha Tandon

Professor in Charge, CLC
& Conference Director

Vote of Thanks

Professor (Dr.) S.C. Rai

Professor, CLC

February 12th - 14th, 2016 Venue: Auditorium & Seminar Hall, CLC, DU



PRACTICE
Gogoi
alit
h Luthra
Solicitor General of India



HMJ Ranjan Gogoi in the centre with HMJ Uday U. Lalit, Mr. Mohan Parasaran, Mr. Sidharth Luthra and other distinguish guest



Mr. Mohan Parasaran



Prof. (Dr.) Usha Tandon



HMJ Ranjan Gogoi (2nd from right) with HMJ Uday U. Lalit (2nd on his right), Mr. Mohan Parasaran (his extreme right), Mr. Sidharth Luthura (his extreme left) and Prof. Usha Tandon (his immediate right)